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ABSTRACT

In the past 8 years, Boston Public schools have introduced various policy changes aimed at institutionalizing educational equality. Standardization efforts have ignored certain student grouping practices that actually exaggerate and institutionalize inequality in Boston Public Schools. Ability grouping ensures the isolation of students labeled as "different," treats diversity and heterogeneity as liabilities, and allocates the most challenging and enriching educational experiences primarily to students categorized as most "able." This report examines how school-based and districtwide ability grouping practices have eroded the educational experience for all children and put large numbers of Boston's most vulnerable students at a continuous disadvantage. Tracking practices such as ability grouping in regular classes and student placement in special education, bilingual education, and advanced work classes contribute to the failure of the Boston school system, which loses 40 percent of its students before graduation and provides an inadequate education to the majority of those remaining. Based on both statistical data and educational research, the report defines schooling, shows how sorting and grouping practices create an uneven playing field, analyzes consequences for minority students, advocates restructuring for diversity and equal educational opportunity, and advances de-tracking as a moral imperative. Alternative instructional approaches (like accelerated learning, cooperative learning, and peer and cross-age tutoring) are recommended. Extensive chapter references appear at the end of the report. A brochure which describes this report is included. (MLH)

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Locked In/ Locked Out

Tracking and Placement Practices in Boston Public Schools

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A Report by the Massachusetts Advocacy Center

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The photographs contained in this report are for illustrative purposes only. There is no relationship between a particular child and the text. Case studies contained in the report are real. Names and identifying characteristics have been changed to protect confidentiality.

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Tracking and Placement Practices in Boston Public Schools

A Report by the Massachusetts Advocacy Center

The Massachusetts Advocacy Center, established in 1973 as an outgrowth of the Task Force on Children Out of School, Inc., represents children's interests before state and local bodies which legislate, regulate and deliver human services to children. The Center acts to strengthen progressive legislative mandates and to close the gap between those requirements and actual service delivery in the fields of education, child welfare, and child health.

The Center uses a multi-strategic approach to problem-solving. Administrative negotiation, regulation writing, case advocacy, public education, litigation are all employed when necessary. Moreover, participation on public task forces gives the Center input into executive branch rule making and policy proceedings.

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Foreword

"What is it like, when you are always a loser?"

This is a question posed in a poem written by a ninth grade public school student. For most people, it is a chilling question to be asked by one so young. In response they might ask, "What has made this child's reality so bleak?" This report describes educational practices in the Boston Public Schools, tracking and ability grouping, that answer this question. These practices circumscribe rather than expand childhood aspirations, reinforce rather than remove perceived self-limitations, and in the end do irreparable harm to children society has entrusted to the public schools.

With this report the Massachusetts Advocacy Center begins its third decade of advocating for educational reform in the public schools of Boston and the Commonwealth of Massachusetts. For twenty years we have struggled for full implementation of special education and transitional bilingual education. We have addressed ourselves to harmful educational practices which result in school exclusion and staggering dropout rates, practices which have a demonstrable differential impact on racial and ethnic minorities.

Throughout, two fundamental assumptions have undergirded our work: all children are entitled to a high quality education and all children can learn. In our view, contrary assumptions, regrettably held by many in the school community, are merely rationalizations for the failure of the system to do its job.

We have documented time and again the failure of the schools to live up to these assumptions. Indeed, our observations about schooling in Boston and Massachusetts are now commonplace throughout the nation. This widespread concern has generated a resurgence of school reform activity unparalleled since the late 1800s. This reform activity finds its energy in a shared belief — no matter what the political persuasion of the commentators — that education is the key to the future not only for the children but the nation as well.

Some cast the need to prepare for the future in the narrowest of economic terms: we must reform the schools and the quality of education provided to students in order to compete in the international marketplace. It follows then that we should "invest" in our schools because they deal with our most "precious resource" — children. Others frame the question in terms of one of the oldest American positions: public education must focus on equity and egalitarianism in the pursuit of quality so that students will be prepared to participate in a functioning democracy.

In our view, neither position need be exclusive. Indeed it is unlikely that proponents of either position would disagree with the goals of the other. But how one views the issue does create a certain emphasis and direction for school reform. The first wave of school reform in the 1980s focused on the economic imperatives. It called for higher standards, increased use of standardized testing, longer school years, and greater teacher accountability. In short, it sought to impose on public schools what were presumed to be productivity mechanisms of American industry. In doing so, it actually called for more of the same but with a more intensified application.

But there were real costs to these reform efforts, costs which gradually became unacceptable. Dropout rates did not go down. Even if test scores went up, serious reservations existed as to whether these scores were indicators of either the quality of education or the potential of individual students to participate successfully in further learning.

Moreover, we would argue that the rhetoric of the first wave of the reform movement limited its vision and outcome. While some said we should invest in children to invest in our future, they simultaneously argued that many children — perhaps the majority in urban systems — were “at risk.” By implication some children were not at risk. The proponents could not articulate a reason to invest in a risk when one could invest in a sure thing. In short, they fostered the promotion of inequity and inequality in the name of quality. Thus, the second wave of school reform observed the harmful consequences of the first model and began to call for a dramatic rethinking of schooling, the elimination of unsound practices, and a restructuring of schools in manner to meet both the call for quality and the need for equity.

This report endorses the position of that second wave of reformers and calls for the restructuring of the Boston schools to eliminate the unsound practices of tracking and ability grouping which sort, label, and ultimately discard the majority of Boston students. These practices and the theory behind them have dominated American schooling for nearly two centuries. In theory, they are designed to meet the twin goals of insuring every child access to public school, thus meeting the democratic ideal of equal opportunity, while at the same time reconciling this egalitarian impulse with a meritocratic one.

Under this hypothetical system students are provided an education tailored to meet their “ability” measured by some set of standardized tests, personal assessment, and theoretically neutral performance standards. Students are sorted, labeled, and provided an education which meets their needs and placed in such a way that those perceived to be the most able are provided opportunity and those perceived to be less able are provided opportunity as well. But the opportunities are qualitatively different because the students are qualitatively different. Under this theory all are protected, and all are adequately served.

This theory is wrong. Its application is immoral. And its implementation unnecessary. This report shows that tracking and ability grouping in the Boston schools begin to foreclose the opportunity for quality education and full development as early as the first grade, and decisively by the middle grades. Children are held back in grade, channeled into special education, and placed in classes structured in such a way as to deny access to valued knowledge to all but a few. This insures that whatever disadvantages children bring to school are reinforced rather than overcome. For the majority of Boston school children, education is cast in a framework of low expectations, identification of presumed deficits, and the prediction of limited futures.

This report shows that the harm visited upon all students by tracking and ability grouping practices falls most heavily upon the most vulnerable, racial and linguistic minorities, children with special needs, and the poor. Public mythology holds education to be the route out of disadvantage. Perversely, schools that utilize tracking and ability grouping rather than open up a highway to enhanced future opportunities set up gates that bar the roadway. Moreover, because of the manner in which the practices operate in Boston, they impede rather than enhance all students' ability to function in a pluralistic democratic society. Both practically and philosophically these students decidedly are not prepared for the world of the 21st century.

The debate which has surrounded tracking and ability grouping historically proceeded from ideological and political differences concerning democracy, meritocracy, and a utilitarian view of public schools. At this point in our history, however, we cannot and need not forge public policy concerning public education on personal opinion or ideology. Mountains of research, unchallenged and uncontested, shows that tracking and ability grouping practices are unsound educationally and clearly unnecessary to the proper administration of the schools. This report discusses this research, relates it to common practices in Boston schools, and points the way to promising alternatives developed across the country and in Boston as well. The research and existing successful programs demonstrate that no practical, educational, or intellectual reason exists to continue. This report calls on the school system and those who influence it to build on the strengths of students, to view their differences as opportunities rather than obstacles, and to discard forever the pervasive notion that students "get what they deserve." In fact, students get what we give them, and then we develop rationales that this is all they deserve.

We do not believe that Boston citizens want a school system which provides a "good enough" education to a small minority of students. Nor do we believe that a caring citizenry endorses the harmful consequences of tracking and ability grouping described in this report. Once these practices are understood, we are confident that the outcomes will be intolerable to most in the city.

But the reform of these practices will not come without hard work on the part of all those who care about schools. It is an undertaking that cannot be left to a few. Rather, all in the education community must commit themselves to a shared vision that schools can and must educate all children. This means that administrators, teachers, and parents must frame the education debate in terms of high expectations, equality of opportunity, and equity. We must invest our best thinking and resources in the belief that all Boston students are "children of value" rather than "children at risk."

If we do not do this, children will continue to be denied quality education. Worse yet, hundreds and thousands of ninth graders will continue to look at their futures and ask: "What is it like when you are always a loser?"

Stephen R. Bing
Executive Director
Massachusetts Advocacy Center

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Introduction

"Grouping and placement practices which categorize students by alleged ability ensure the isolation of students labeled as 'different,' treat diversity and heterogeneity as liabilities rather than assets, and allocate the most challenging and enriching educational experiences primarily to students categorized as most 'able.' These practices undermine whatever equality of learning opportunities the attempts to standardize curriculum, promotion requirements, and textbooks were intended to assure."

Jamie, Keesha, Oswaldo, and Tammy are all students in Boston. They are all subject to a set of standardized curriculum objectives; all are enrolled in "regular" schools, in classrooms with "regular" teachers. Yet these students do not necessarily receive the same quality of education in Boston Public Schools.

In the past eight years, Boston Public Schools have introduced a variety of policy changes in an attempt to institutionalize educational equality.¹ Yet steps toward standardization have ignored and left untouched an array of student grouping practices that actually exaggerate and institutionalize inequality in Boston Public Schools. These grouping and placement practices which categorize students by alleged ability ensure the isolation of students labeled as "different," treat diversity and heterogeneity as liabilities rather than assets, and allocate the most challenging and enriching educational experiences primarily to students categorized as most "able." These practices undermine whatever equality of learning opportunities the attempts to standardize curriculum, promotion requirements, and textbooks were intended to assure.

School-based and districtwide practices that group students by "ability" erode the educational experience for all children and put large numbers of Boston's most vulnerable students at a disadvantage which increases with each passing year. Within "regular" education, a variety of such grouping practices whittles away at the educational progress of many students. At the same time, the siphoning of large numbers of young people out of the mainstream and into one special program or another creates further stratification.

This report examines how school-based and districtwide practices that group students by "ability" erode the educational experience for all children and put large numbers of Boston's most vulnerable students at a disadvantage which increases with each passing year. Within "regular" education, a variety of such grouping practices whittles away at the educational progress of many students. At the same time, the siphoning of large numbers of young people out of the mainstream and into one special program or another creates further stratification. Together, these tracking practices — both the ability grouping of students in "regular" education and the placement of many students in formal categorical programs such as special education, bilingual education, and Advanced Work Classes — contribute to the failure of the Boston school system, a system which consistently loses two-fifths of its students before graduation and provides a woefully inadequate education to the majority of those who remain.²

The practice of grouping students by "ability," though widespread, is both harmful and unnecessary. Recent research demonstrates clearly that this practice results in the allocation of the greatest educational advantages to the strongest students and excludes the most vulnerable — frequently minority, non-English-speaking, poor, and disabled students — from access to the most valued knowledge in our society. Thus, students grouped according to their "ability" frequently fulfill the expectations implied in their label. Students defined as "less able" generally receive an education that perpetuates a pattern of low achievement and locks them out of future opportunities; and while students defined as "more able" may consistently meet high performance expectations, research shows no greater improvement in their achievement than would have occurred had they been placed in mixed ability groups with comparable curriculum and instruction. Once grouped, students rarely leave their position in the educational hierarchy, and if they do, they move downward on the educational ladder. Although researchers and practitioners alike have identified viable alternatives to grouping by presumed ability, Boston schools' continued reliance on tracking practices ignores these alternatives, ensuring that institutionalized inequality will characterize the city's schools regardless of other changes.³

This report is based on both statistical data and educational research. Interviews with students, school staff, parents, and community-based youth workers further highlight the qualitative experiences students have inside schools and help capture the realities of student life that are not reflected in statistics. While statistical indicators may suggest some direction for school reform, the voices of Boston's students and those working on their behalf must also inform such efforts. Their comments provide valuable insights into the daily routines, practices, and conditions that isolate and devalue certain groups of students, allocate effective learning opportunities to only a minority of the school population, and undermine the potential of schools to become communities that develop the intellectual, social, and emotional capacities of all students.

What Is School?

At the core of this report lies a set of questions that, despite their apparent simplicity, have no easy answers: What is school? What do we want from our schools? What is the purpose of schooling? What vision do we hold for the future of Boston students? What vision do they hold for themselves?

Students attend school in anticipation of becoming "educated." Indeed, although schools have multiple goals and are also called upon to help students reach social, vocational, and personal objectives, a major purpose of schooling is to provide students with experiences that will engage them in intellectual and academic pursuits. No other institution in the lives of children embodies such a mission. If schools fail in this purpose, students may lose forever the opportunity of acquiring certain knowledge that is valued in society. Moreover, they may miss out on the opportunity to develop habits of creative and critical thinking, problem solving, and independent analysis which this society associates with leadership and high status vocational roles. These skills are critical if poor children in particular are to succeed in school and escape poverty.

Real schools are far more than a collection of discrete programs and must be greater than the sum of their parts. Schools must be seen as communities of learners engaged in fulfilling shared commitments, not simply to the formal learning tasks associated with schooling or to a set of abstract "standards," but also to each member of the community. The concept of schools as communities is well grounded in the tradition of American public education and rests on the ideals of democratic citizenship: respect for human rights and the dignity of each individual, equality, fair play, and equity. The purpose of schools as communities must be to prepare all students not only for employment and individual pursuits but also for active citizenship in the world of the next century, a world that will pose increasing demands on this country's capacity to embrace diversity within the framework of democracy.

A major purpose of schooling is to provide students with experiences that will engage them in intellectual and academic pursuits. No other institution in the lives of children embodies such a mission. If schools fail in this purpose, students may lose forever the opportunity of acquiring certain knowledge that is valued in society.

The assumptions that underlie Boston's sorting and placement practices — the definition of ability and intelligence as immutable, the view that homogeneity in student groups is preferable to diversity, and the belief that opportunity must be allocated on the basis of "merit" — place severe limits on the achievement of Boston students.

The tracking and placement practices that characterize Boston schools fundamentally contradict both the mission of schools to provide access to knowledge and the vision of schools as democratic communities. Instead of bringing students and staff together, these practices isolate and segregate students and staff from each other. Rather than encompassing diversity and differences, these practices seek sameness and homogeneity. And instead of distributing the benefits of high expectations and desirable resources equitably, these practices ensure that the advantages of schooling, including access to knowledge, will be allocated to a minority, defined as the most able academically, at the expense of the majority.

The findings of this report suggest that the assumptions that underlie Boston's sorting and placement practices — the definition of ability and intelligence as immutable, the view that homogeneity in student groups is preferable to diversity, and the belief that opportunity must be allocated on the basis of "merit" — place severe limits on the achievement of Boston students. These assumptions and the practices they support tend to serve the convenience of the school system, not the educational needs of the students. Students' lives, present and future, are vastly diminished in their wake.

Sorting and Grouping Practices: Creating an Uneven Playing Field

A careful look at the Boston school system overall reveals that the sorting, categorizing, and tracking of students pervades all aspects of life in Boston Public Schools. These sorting practices occur both across schools and within schools. For example:

- Beginning in elementary school and continuing at the middle and high school levels, Boston students are sorted and labeled according to their "deficits" or "gifts." Subsequent placement and tracking of students according to their perceived needs and abilities is likely to have a powerful impact on students' access to knowledge, overall school achievement, school and classroom learning environments, and future life opportunities of all students.
- Despite efforts toward standardization, Boston students have significantly different educational experiences in Boston Public Schools according to their assignment to different programs and often their membership in a particular racial, ethnic, or socio-economic group. African-American, Hispanic, and some Asian students are most likely to be categorized by their "deficits" beginning in the early grades. At the same time, white and Asian students are more likely to be placed in programs that emphasize their "abilities" or "gifts," particularly after the elementary years.

- The labeling and sorting process is so common in Boston's elementary grades that probably a majority of students arrive in middle school having already experienced placement apart from their peers, either through non-promotion (which separates them permanently from classmates in their age-appropriate grade) or through full- or part-time separation from the regular education classrooms in their school.
- Stratification begets stratification: Since the labeling and placement process itself is likely to contribute to reduced student achievement, fewer and fewer students are deemed "ready" for grade-level learning at each sorting point. The creation of new categories for "unready" students removes them even further from grade level knowledge.

It is commonplace to note that Boston students enter school with diverse strengths and needs. While some children have had extensive pre-school experiences, others have had little early exposure to formal teaching and learning. Economic and class background also contribute to the diversity of the city's students as do family and neighborhood experiences. What is routinely ignored, however, is that Boston's response to such diversity, far from closing the gaps, may exacerbate these differences and, in the process, contribute to greater inequality.⁴

Thus far, Boston's solution to the problem of low achievement has been to exhort students to work harder and teachers to teach according to a more standardized formula. However, this approach assumes that students' experiences inside their schools are similar and ignores the effects of pervasive sorting practices which, in reality, create an uneven playing field for all children. Both inside individual schools and across the district, students chosen for the winning teams clearly benefit from certain advantages in access to knowledge and climates for learning. In contrast, students on Boston's losing teams encounter a variety of obstacles that make success in the educational contest much more difficult. While students on all teams may be playing their best, the differential distribution of educational opportunities raises the odds that the final score will be both unequal and inequitable.

At a time when many voices are calling for the "restructuring" of public schools, broad-based discussion of school tracking and placement practices is imperative. Indeed, a commitment to alter these inequitable practices must be at the center of the restructuring of Boston schools. Changes in school governance are not enough; nor are collaborative undertakings between schools and community-based organizations or businesses although both may be necessary. What is most important is a mission to create good schools for every single student, schools which communicate high expectations, offer challenging learning environments, and provide a high level of support for all students. Tracking is a major barrier to fulfilling this mission. De-tracking Boston schools, then, belongs at the top of the restructuring agenda.

It is commonplace to note that Boston students enter school with diverse strengths and needs. What is routinely ignored, however, is that Boston's response to such diversity, far from closing the gaps, may exacerbate these differences and, in the process, contribute to greater inequality.

Districtwide Sorting Practices: An Escape from the Mainstream

While the implementation of special programs to address the needs of special populations may be portrayed as Boston's best effort to respond to diversity, the extent to which removal from the mainstream actually meets the educational needs of these students varies dramatically according to placement category and individual student characteristics.

Tracking in Boston consists of not only the practice of grouping students by so-called "ability" within schools and classes, but also the districtwide sorting of students out of the educational mainstream and into formal categorical programs. These programs are protected by law or policy and are designed to provide an education matched to the needs of individual children. However, while the implementation of special programs to address the needs of special populations may be portrayed as Boston's best effort to respond to diversity, the extent to which removal from the mainstream actually meets the educational needs of these students varies dramatically according to placement category and individual student characteristics.

These variations become obvious when comparing educational programs such as special education, bilingual education, and "Advanced" programs. Since together these programs account for approximately one half of Boston's enrollment, restructuring within any school requires an understanding of the relationship of these programs to the school as a whole. Rational restructuring also requires a rethinking of how these programs can work, not as an escape from a narrowed and impoverished mainstream, but as a vehicle for enriching the educational experience for all students within the mainstream.

A review of data describing formal placement categories affecting Boston students reveals the following:

TABLE 1
Placement Rates for All Boston Students (1985-86)

GRADE	SPECIAL EDUCATION			BILINGUAL	ADVANCED WORK/ EXAM SCHOOLS
	Mainstreamed	Separate	Total		
1	9.2	5.6	14.8	16.8	-
2	13.2	8.4	21.6	17.4	-
3	17.8	9.1	27.0	18.2	-
4	18.7	8.6	27.3	16.6	8.6
5	15.5	8.6	24.1	17.3	8.6
6	15.7	9.3	25.0	14.0	10.5
7	14.2	8.1	22.3	12.6	18.4
8	14.3	8.2	22.5	12.7	16.9
9	14.3	7.3	21.6	9.8	20.2
10	12.2	5.7	17.9	11.3	18.8
11	10.1	5.1	15.1	12.7	18.4
12	9.2	5.3	14.5	11.4	18.3

1. Formal sorting and placement practices begun in the early grades form the foundation for a variety of rarely interconnecting subsystems which offer significantly different learning experiences to children in Boston Public Schools.

Specifically:

- While the majority of students begin school in the educational mainstream, an increasing percentage are formally labeled and sorted through the elementary grades, a process typically separating these students from full-time mainstream education.
- By fourth grade, close to a majority of students may already have experienced some kind of sorting and labeling process which pulls them from the mainstream full-time or part-time and which dramatically affects their future learning opportunities.
- In every grade until the tenth grade, the percentage of Boston students categorized by their "needs" or "deficits" and enrolled in special education exceeds the percentage defined by their "gifts" or "abilities" and enrolled in Advanced Work Classes or examination schools.
- Mainstream enrollment — as defined by students who have progressed on a "normal" path, moving ahead from one grade to the next every year without being separated in some way from their peers — decreases with every grade. As children move out of the early grades, the percentage of Boston students remaining unlabeled or unclassified and in their age-appropriate grade declines dramatically. By the time students enter the middle grades, perhaps fewer than half of all students remain in the mainstream.⁵

Table 1 describes these patterns in Boston by grade.

2. Large numbers of students of all racial/ethnic groups in Boston experience their schooling wholly or partly outside of the mainstream, but the placement which separates students from the mainstream varies dramatically by racial/ethnic group.

Specifically:

- While African-American, white, and Hispanic students have roughly equal chances — nearly three out of 10 — of placement in special education in grade 4, chances of special education are somewhat higher for African-American and Hispanic students than for white students in grades 7 and 10.
- The likelihood of special education placement is significantly higher for African-American, white, and Hispanic students than for Asian students in grade 4, and four to five times higher in grades 7 and 10.
- While placement rates in formal fourth grade Advanced Work Classes are roughly equal for African-American and white students, Hispanic students are placed in such classes at a much lower rate than their African-American, white, and Asian peers.

Figures 1A, 1B, 1C, and 1D describe these findings.

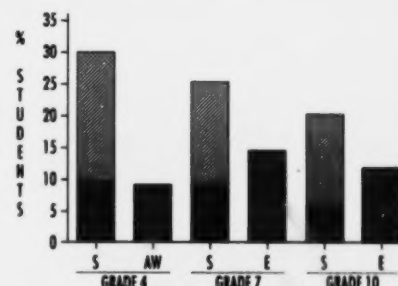


Fig. 1A. African-American Student Placement Rates for Grades 4, 7, and 10 (1985-86)

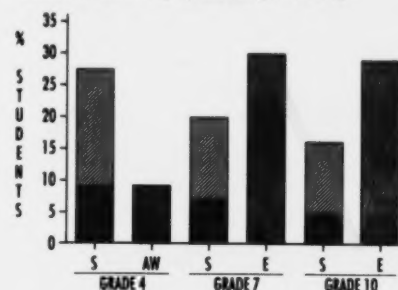


Fig. 1B. White Student Placement Rates for Grades 4, 7, and 10 (1985-86)

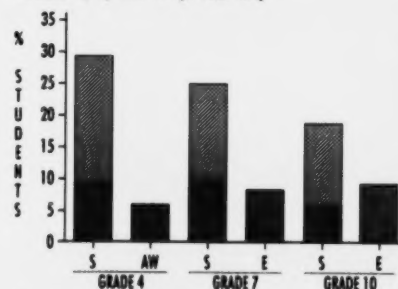


Fig. 1C. Hispanic Student Placement Rates for Grades 4, 7, and 10 (1985-86)

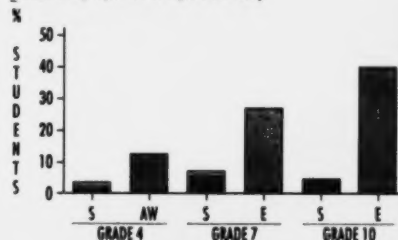


Fig. 1D. Asian Student Placement Rates for Grades 4, 7, and 10 (1985-86)

Mostly Separate S = Special Education
 Mainstreamed AW = Advanced Work
 Advanced Work E = Exam School

3. In the higher grades, white and Asian students have strikingly better chances than their African-American and Hispanic peers of being placed in "high level" placements defined by students' "abilities."

Specifically:

- By seventh grade, approximately 30% of all white and Asian students are enrolled in Boston Latin School and Boston Latin Academy, Boston's examination schools, compared to 14% of all African-American students and only 8% of all Hispanic students in that grade.
- By tenth grade, 29% of all white students and 40% of all Asian students are enrolled in examination schools (including Boston Latin School, Boston Latin Academy, and Boston Technical School); at the same time, only 13% of African-American and 9.1% of Hispanic tenth graders are registered in these schools.

Tables 2A, 2B, and 2C summarize these findings.

TABLE 2A
Grade 4: Placement Rates for Boston Fourth Graders (1985-86)

RACE	SPECIAL EDUCATION			BILINGUAL	ADVANCED WORK
	Mainstreamed	Separate	Total		
Black	20.6	9.3	29.9	4.6	8.7
White	19.5	8.3	27.8	4.5	8.8
Hispanic	19.1	10.1	29.2	55.0	5.7
Asian	2.9	1.4	4.3	39.4	13.6

TABLE 2B
Grade 7: Placement Rates for Boston Seventh Graders (1985-86)

RACE	SPECIAL EDUCATION			BILINGUAL	EXAM SCHOOLS
	Mainstreamed	Separate	Total		
Black	15.9	9.6	25.5	4.7	14.0
White	13.4	6.7	20.0	3.3	29.9
Hispanic	15.2	9.6	24.8	39.6	7.9
Asian	4.4	0.6	5.1	31.8	27.1

TABLE 2C
Grade 10: Placement Rates for Boston Tenth Graders (1985-86)

RACE	SPECIAL EDUCATION			BILINGUAL	EXAM SCHOOLS
	Mainstreamed	Separate	Total		
Black	14.4	6.6	20.0	6.8	12.7
White	11.1	5.6	16.7	2.5	28.6
Hispanic	11.9	6.2	18.2	31.8	9.1
Asian	3.7	0.3	4.0	32.7	40.3

4. African-American, white, Hispanic and Asian students experience significantly different odds of placement in "deficit" or "high ability" categories.

For example:

- African-American students are more than three times as likely to be placed in special education classes as in formal "high ability" categories in fourth grade, nearly twice as likely in seventh grade, and one and a half times as likely in tenth grade.
- For African-American fourth graders, enrollment in substantially separate special education programs alone exceeds their enrollment in Advanced Work Classes.
- Hispanic students are more than five times as likely to be placed in special education as in "high ability" classes in fourth grade, three times as likely in seventh grade, and twice as likely in tenth grade.
- For Hispanic students in both fourth and seventh grades, enrollment in substantially separate special education programs alone exceeds enrollment in Advanced Work or exam school classes.
- White students are three times as likely to be placed in special education as in "high ability" classes in fourth grade; but in seventh and tenth grades, the odds favor their placement in "high ability" settings over placement in special education.
- Asian students are more than five times as likely to be placed in formal Advanced Work Classes or examination schools than in special education in fourth and seventh grades; "high track" placement is ten times more likely than special education placement for Asian students in tenth grade.

Figures 2A, 2B, and 2C show the comparative chances of placement in "deficit" and "ability" categories by racial/ethnic group for grades 4, 7, and 10 in Boston Public Schools.

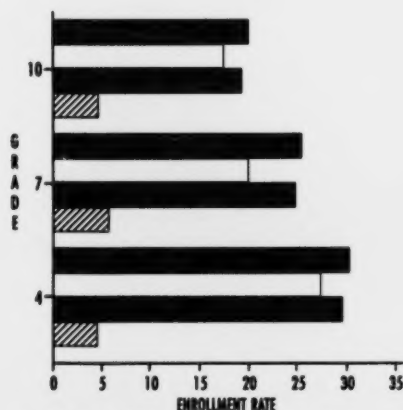


Fig. 2A. Special Education Enrollment Rates for Grades 4, 7, and 10 (1985-86)

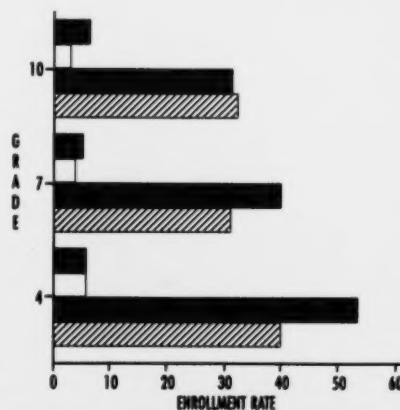


Fig. 2B. Bilingual Education Enrollment Rates for Grades 4, 7, and 10 (1985-86)

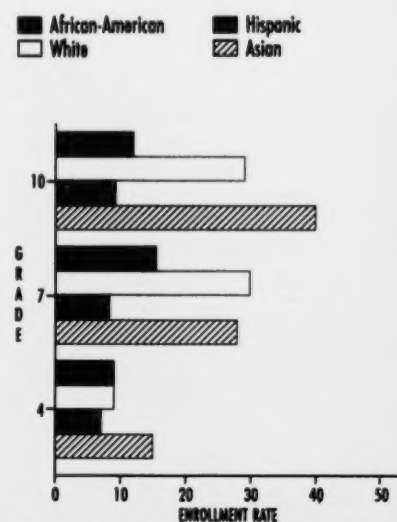


Fig. 2C. Advanced Work/Exam Schools Enrollment Rates for Grades 4, 7, and 10 (1985-86)

Restructuring for Diversity and Equal Educational Opportunity

To many parents and educators, these data will simply attest to Boston schools' efforts to provide students with the program they deserve. Indeed, placements in special education, bilingual classes, or Advanced Work/exam school tracks do reflect, in part, a well-meaning attempt to address individual needs and provide certain students with an alternative to a mainstream that fails to educate them appropriately. Placement in such programs often appears to be the only available means of mobilizing adequate resources and attention for students identified as "special" in some way.

But ironically, the effort to respond to differences by separating certain students from full-time participation in "regular" classes may itself militate against developing a mainstream that can provide an acceptable education to all members of the school community. Such separation robs the mainstream of opportunities for learning that could enrich schooling for all students. Moreover, the sheer numbers of students defined as "different" suggest that Boston's definition of "normal" is an arbitrary one that requires reconceptualization.

Broadening and strengthening the mainstream of Boston Public Schools requires the de-tracking of every single school in the district. In turn, de-tracking requires restructuring curriculum, instruction, and student assessment practices to provide access to knowledge to all members of the student population and to ensure equal access to educational opportunity.

The record suggests that Boston's mainstream as currently structured is inadequate to the task of educating many students defined as "different" from the imagined norm. Thus, while the data we present suggest the necessity of reforming specific school practices and programs, this is only a small part of the solution. Most importantly, our findings establish the need to use the best practices of both categorical programs and "regular" education to broaden the mainstream itself to meet the needs of all students for both academic achievement and human connections. Broadening and strengthening the mainstream of Boston Public Schools requires the de-tracking of every single school in the district. In turn, de-tracking requires restructuring curriculum, instruction, and student assessment practices to provide access to knowledge to all members of the student population and to ensure equal access to educational opportunity.

Providing all students with equal access to educational opportunity does not mean that all students will benefit equally. Individual differences will always exist; individual students will benefit in different ways from what schools teach them. But as the Council for Basic Education has concluded:

The point is that, by segregating students for teaching purposes, we don't simply allow these differences to occur naturally — we encourage them. In fact, we force them.⁶

The presupposition that only certain students can benefit from certain school practices and access to knowledge lies at the core of current grouping practices. That presupposition unnecessarily bars large numbers of students from the kinds of school experiences that could promote their academic success.

The grouping and placement practices that pervade Boston schools currently stand in the way of equal access and convey the message that certain academic "abilities" or "deficits" demand separation and segregation. Such practices are educationally unsound because they "prejudge how much children will benefit and result in the absence of some children from places where academically and socially valued subjects are taught."⁷ They are unacceptable because they contradict one of this country's most cherished ideals — that of democratic schooling.

De-Tracking: The Moral Imperative

Decisions about how a society structures its schools are moral decisions. The organizational arrangements of schools communicate messages about the value they place on each student in the school community, the norms that will underlie the school community as a whole, and the role of equity in the distribution of resources and knowledge. The tolerance of differential educational experiences in Boston suggests that decision-makers and the broader public believe unequal educational opportunity is morally acceptable. This report argues that the costs of tracking — the enormous waste of individual potential and the erosion of the school community — make this practice both ineffective and unethical.

It is time to reconceptualize education for Boston's students within a framework of social justice and equal educational opportunity for all students. All students deserve state-of-the-art practices. Where they exist — whether in the mainstream or in categorical programs — they should be extended into the whole school so that all students can benefit.

Rather than accept inequity as natural or justifiable, we believe that:

Public schooling should promote forms of morality and sociality in which students learn to encounter and engage social differences and diverse points of view...to engage in critical analysis and to make choices regarding what interests and knowledge claims are most desirable and morally appropriate for living in a just and democratic state.⁸

Boston Public Schools must purposefully teach all students how to learn with, live with, understand, and value people different from themselves. At the same time, a sense of community and social justice, not privilege or definitions of "deserving" and "undeserving," must determine educational policy and practices for all students. Such democratic objectives must guide restructuring of Boston schools.

It is time to reconceptualize education for Boston's students within a framework of social justice and equal educational opportunity for all students. All students deserve state-of-the-art practices. Where they exist — whether in the mainstream or in categorical programs — they should be extended into the whole school so that all students can benefit.

Guiding Principles for Restructuring

Restructuring Boston schools for equal access to knowledge must realize three major objectives:

- Schools must reduce the isolation of groups of students from the mainstream and from each other.
- Schools must define student differences as assets which strengthen the whole school by providing a learning context which reflects the diversity of the larger world.
- Restructuring must result in extending access to excellent curriculum and instruction, now available in some measure to some students, to all students.

Boston must adopt these goals for its schools, not only because all children deserve the best education available, but also because the future strength of the city depends in part on the schools' capacity to communicate and nurture in their students the ideals of democracy in a pluralistic society.

The restructuring of schools in Boston must involve a radical reorganization of all school programs in relationship to each other, not to divert attention from the needs of specific vulnerable groups, but to provide such attention within a schoolwide context. Such an approach implies that no one part can change without a change in the whole.

Restructuring efforts in Boston schools must take the components that are rightfully the building blocks of public education — including special education, bilingual education, and programs for academically talented students — and incorporate the best practices of all these programs into the mainstream to realize excellent education for all students within each school. The restructuring of schools in Boston must involve a radical reorganization of all school programs in relationship to each other, not to divert attention from the needs of specific vulnerable groups, but to provide such attention within a schoolwide context. Such an approach implies that no one part can change without a change in the whole.

This report, then, is a call for a long-term, broad-based effort to strengthen, diversify, and enrich the educational mainstream so that all students can succeed. Because state-of-the-art practice can guide school restructuring and improvement, this report also describes promising school-based efforts that are working toward this goal. The approaches we describe attempt to redefine the relationships of special programs to the mainstream of each school. They suggest ways in which schools can strengthen the regular education program to meet the needs of diverse groups of students without sacrificing the entitlements of the most vulnerable students, a commitment to high standards, or attention to individual needs. Such examples highlight how much can be done. They challenge Boston to begin.

PHOTO: JOHN TLUMACI



2

Boston's Academic Mainstream

Grouping Practices and
Their Consequences

"Given obvious disparities in learning conditions, the implication that students 'get what they deserve' does a disservice both to individual students and to the school community as a whole. By defining 'excellence' as a commodity to be distributed only to the 'worthy' few, Boston schools abdicate their responsibility to employ effective, state-of-the-art practices on behalf of all children."

In Boston Public Schools, formal and informal grouping mechanisms operate at every level of schooling. Students not categorized as in need of special education or bilingual education ostensibly comprise Boston's mainstream. Yet even among these students, few escape the sorting and labeling practices that characterize daily life in Boston's schools.

In the elementary grades, these practices assume the widely accepted and seemingly innocent forms of non-promotion, grouping by "ability" within largely heterogeneous classrooms, and the placement of young children in "transitional" or "preparatory" classes. By the secondary grades, these practices have evolved into more inflexible forms of tracking. Indeed, in many of Boston's middle schools, whole clusters of students are sorted and labeled by "ability," while at the high school level entire schools are arranged in a highly stratified hierarchy.

Within the mainstream, the educational experiences of Boston's students vary dramatically according to their group and track placements, with these placements significantly affecting students' achievement levels and future life chances. This chapter describes how differences in so-called "student outcomes" cannot be attributed solely to innate differences among Boston's students. Rather, in large measure they are also a function of school grouping practices themselves.

Sowing the Seeds of Inequality: Sorting Practices in Boston's Elementary Grades

Two sorting practices in particular — non-promotion and classroom-based ability grouping — are so prevalent in the elementary years that they are accepted as common sense. Along with whole-class grouping of students by "ability," they create conditions that limit severely and unnecessarily the progress of many students in Boston's elementary schools.

The sorting and labeling process within Boston schools begins in the early elementary grades and operates largely without question. Indeed, two sorting practices in particular — non-promotion and classroom-based ability grouping — are so prevalent in the elementary years that they are accepted as common sense. Each of these practices undermines both the academic performance and self-image of individual students. Along with whole-class grouping of students by "ability," they create conditions that limit severely and unnecessarily the progress of many students in Boston's elementary schools.

Non-Promotion in the Elementary Grades

Annually, approximately 1,000 first graders, 20% of all first graders in Boston Public Schools, are not promoted. In addition, another 15% of Boston's second and third graders are retained in grade each year.¹ Such non-promotion patterns have a disproportionate impact on Boston's African-American and Hispanic students, who repeat the early grades at nearly twice the rate of their white and Asian peers. These patterns suggest that by the time they reach fourth grade, approximately one-third of all Boston students may have already experienced school failure.

For many retained students, the experience of non-promotion may mark their first separation from their peers as a result of their "difference." Some of these students may also be referred to special education; others simply become known as "repeaters." All non-promoted students are, in essence, being assigned to a lower ability group based on the belief that their performance level is closer to that of younger students than to their age-similar classmates and the assumption that they are not "ready" to progress with their peers to the next grade. In this sense, non-promotion is itself a form of ability grouping.

The vast body of research on non-promotion indicates that most students do not benefit from a second year in grade. For example, in a South Carolina study of 6,000 elementary school students, only 20 to 35 percent of non-promoted students received higher scores on standardized test after their second year in the same grade.² While some teachers of retained students report student improvement the second year in grade, they are usually not able to compare the long-term progress of retained students with that of similar students who were promoted. In fact, researchers Mary Lee Smith and Lorrie Shepard note that first grade students who are "behind" their classmates but are promoted typically catch up with their grade-level peers by third grade.³

Contrary to the assumption that retention remediates achievement deficits, non-promotion — like ability grouping — actually tends to work as a brake on students' academic progress. Following their second year in grade, most retained students "spend the rest of their academic careers in vain attempt to catch up."⁴ Indeed, some researchers have found that many students who repeat a grade actually score lower on standardized tests the second time around.⁵

Such findings indicate that non-promotion, rather than reducing disparities among students in subsequent grades, may actually entrench them. Sorting students out of their age-appropriate grade through non-promotion only creates the illusion that all students who arrive in the next grade will be similarly "ready" to perform the tasks assigned to that grade. As Smith and Shepard point out, teachers' efforts to restrict the range of abilities within their classrooms, whether through non-promotion or other means, can never realize their hopes for homogeneity; in fact:

Retaining a child in first grade means that the next year some first grade teacher will have pupils with a range of ages of well over two years, with corresponding variations in size, maturity, and accomplishment. In any elementary grade the range of achievement spans several grades....There will always be a child who is the youngest, the smallest, the least able and the least mature in any group.⁶

Moreover, non-promotion takes a toll on the emotional and social adjustment of elementary school students. Some studies indicate that young children feel anger and sadness because of retention and perceive a second year in grade not as a second chance for a fresh start, but as punishment for their own deficiencies.⁷ One study reports that young children identify their three biggest fears as death of a parent, blindness, and grade retention.⁸ The prevalence of non-promotion in Boston's early grades makes it likely that one of the worst fears of many children will come true.

For many retained students, the experience of non-promotion may mark their first separation from their peers as a result of their "difference." These students are, in essence, being assigned to a lower ability group based on the belief that their performance level is closer to that of younger students than to their age-similar classmates and the assumption that they are not "ready" to progress with their peers to the next grade. In this sense, non-promotion is itself a form of ability grouping.

In maintaining the impression of accountability to standards at each grade level, the practice of holding students back confuses tougher schooling with better schooling. Indeed, since non-promotion locates the cause of failure in the student rather than in the interaction between the student and school practices, it typically does not trigger school reform or hold school staff responsible for designing curriculum and teaching approaches appropriate for a diverse student population. As John Goodlad points out:

Retaining a large percentage of poor students in a grade for an additional year is less proof of standards than of instructional ineffectiveness. The good teacher is not the one who fails a third of the class but the one who brings an overwhelming percentage of children to mastery of the material.⁹

Ability Grouping in the Elementary Grades

The misuse of ability grouping poses serious hazards. Most troubling is the potential of ability grouping to exaggerate differences rather than reduce them. In turn, widening achievement gaps lock students forever into their place in the educational hierarchy, creating the illusion that "ability" is destiny.

Seeking further homogeneity, school districts with high grade retention rates are also more likely to employ widely the practices of tracking and ability grouping.¹⁰ In Boston, these practices are widespread from the elementary grades onward, presenting formidable barriers to student success in the public school mainstream. While some schools group entire classes of students by ability — even in first grade — the use of in-class ability groups is more common. Begun as early as kindergarten, the practice is accepted as an effective way to create greater homogeneity among students and viewed as a convenient response to perceived differences in students' academic preparation.¹¹ Decisions regarding this practice are made at the school level.

While ability grouping — known in some Boston schools as "leveling" — may be a well-intentioned and occasionally useful effort to individualize instruction, its effectiveness depends upon a number of conditions. Specifically, students should remain in heterogeneous classes for most of the day and be regrouped for only one or two subjects such as reading or mathematics; the regrouping should reduce heterogeneity in the skill being taught; groups should be kept small enough so that students receive focused attention; and instruction should be adapted to accommodate individual student needs and learning styles, but should be challenging and demanding and have the goal of moving students in lower groups up into the higher groups. Most importantly, group assignments should be flexible and frequently reassessed, and students' primary reference group should be their heterogeneous class, not their ability group placement.¹²

In the absence of district policy on ability grouping, it is unclear whether the implementation of this practice in Boston elementary schools follows these guidelines. Nor is it clear that Boston has acknowledged the potential harm of ability grouping. Indeed, the misuse of this practice poses serious hazards. Most troubling is the potential of ability grouping to exaggerate differences rather than reduce them. In turn, widening achievement gaps lock students forever into their place in the educational hierarchy, creating the illusion that "ability" is destiny.

John Goodlad, for example, has reported that ability grouping in the early grades creates increasingly differentiated outcomes in learning and that *after first grade* the likelihood of students' moving out of their assigned group drastically diminishes. He explains:

One of the reasons for this stability in group membership is that the work of upper and lower groups becomes more sharply differentiated with each passing day. Since those comprising each group are taught as a group most of the time, it is difficult for any one child to move ahead and catch up with children in a more advanced group, especially in mathematics. It is not uncommon for a child in the most advanced group to have progressed five times as fast as a child in the least advanced group over the course of the year.¹³

Goodlad also reports that by fourth grade, the equivalent of four full grades, as measured by test scores, separates children in the top and bottom math groups, and up to six full grades separates those in the top and bottom reading groups.¹⁴

Ability grouping may also have profound effects on students' self-esteem and future life goals. For example, in one study of fourth, fifth, and sixth grade reading groups, researchers found that tracking sets the stage for the formation of friendships and social networks which, in turn, affect student performance and future aspirations.¹⁵ Indeed, in our interviews, elementary students indicated that ability grouping shapes their perceptions of their own abilities and those of their classmates.

Boston students as young as third grade were distinctly aware of ways in which their own classes were divided by reading ability. Usually students categorized these groups as "top," "medium," and "bottom" although some, like Jamie, described only two divisions — "one for the smarter kids and one for the kids who can't read so good." In some schools, students reported these groups had special names: "The top are the Sunbeams, the middle are the Stairways, and the bottom are the Streamers," explained Cary, a third-grader. The names of various groups neither disguise schools' assessment of students' abilities nor mitigate the impact on students, who typically equate their group assignment with their ability. Asked about her reading group in her fifth grade class, for example, Janine replied, "I'm in the middle group;" asked about her ability as a reader, she explained "I'm not good and not bad. I'm in the middle."

While many students we interviewed had clearly absorbed their group labels into their self-perception, some also understood that group assignment independent of academic potential could have a powerful impact on student "ability." Monty, for example, while only in third grade, observed:

There were some bad kids in [my class] — a couple — but they did better because they were with the smart kids. There was one kid whose old teacher was giving him a hard time, so they put him in our class. Our teacher doesn't give him a hard time, so he's better. He's doing better and learning more.

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In Boston, informal ability grouping within the classroom becomes formalized into whole-class grouping through Advanced Work Classes in the fourth and fifth grades of elementary school and the sixth grade of middle school. It is at this point that Boston institutionalizes the differential distribution of positive learning conditions according to "ability."

Advanced Work Classes: Learning Conditions Designed for Success

In Boston, informal ability grouping within the classroom becomes formalized into whole-class grouping through Advanced Work Classes in the fourth and fifth grades of elementary school and the sixth grade of middle school. Seats in these classes are limited, and admission, based on standardized test scores, is selective; approximately 9% of all fourth and fifth graders are enrolled in these classes. It is at this point that Boston institutionalizes the differential distribution of positive learning conditions according to "ability."

Students enrolled in Boston's Advanced Work Classes experience significant educational advantages compared to their peers in most other fourth and fifth grades. Already labeled as the "most academically able," these students also benefit from greater access to effective educational practices and positive learning environments. For example, Boston's fourth and fifth grade Advanced Work Classes typically are assigned the same primary teacher for both years, allowing for greater continuity of instruction and the potential for closer student-teacher relationships. A cap of 20 students per Advanced Work Class also makes greater individualization of instruction possible, and low non-promotion rates encourage stability in peer relationships. Such conditions are rare outside of these classes.

Curriculum and instruction in Boston's Advanced Work program are designed specifically to communicate high expectations and enhance opportunities for intellectual engagement. A specialized curriculum encompasses three elements — "extension" (in-depth study of grade-level curriculum), "acceleration" (basic curriculum *above* grade-level requirements), and "enrichment" (exposure to materials beyond the prescribed curriculum) — and is frequently organized around general themes. Foreign language instruction is also included. Moreover, learning often involves hands-on activities designed for students working in small groups. For example, Darren described how his fourth grade Advanced Work Class was enriched by a curriculum that included special learning assignments:

You [could] do a project. Like last year I made a scene with a castle and with a river, and I made a mountain and, well, like a volcano. It was cool. And we grew stuff — you know, like with a carrot, how you cut off the top and watch the roots grow.

Indeed, Advanced Work teachers themselves benefit from specialized professional development opportunities at the University of Massachusetts, Wheelock College, Lesley College, and a special resource center at Boston High School.

This attention to positive learning conditions, varied curriculum, and effective teaching, is notable for its focus on the qualitative aspects of education — relationships, learning climate, and enrichment activities that allow students to explore their own interests. Such opportunities contrast sharply with the emphasis in many "regular" classes on direct, teacher-led instruction supplemented by exercises in worksheets and workbooks. Students in such classes typically describe assignments such as, in reading, the selection of words from a paragraph or the circling of individual letters in lists of words.¹⁶

Selecting for Success: The Myth of Meritocratic Selection

In Boston, the decision to place students in the fourth through sixth grade Advanced Work track is currently based on student scores on the Metropolitan Achievement Tests and Curriculum Referenced Tests in reading and mathematics taken in May of the second grade. Boston also operates under a policy that distributes seats in Advanced Work Classes proportionately to white, African-American, and "other minority" students.¹⁷ Such a process creates the appearance of assuring fair and objective selection for these classes. However, in the view of many experts on testing and education policy, any placement that depends primarily on standardized test scores is questionable. Indeed, the role played by standardized tests must be scrutinized especially carefully when scores on such tests have the potential to "make or break" a student's future as they do in Boston.¹⁸

While standardized test scores may be useful when used along with other tools to diagnose individual students' learning needs or to follow the progress of individual students over time, researchers consistently point out that such tests are simply not designed to select students for specific programs. In fact, test manufacturers themselves have never provided evidence that students' scores on such tests accurately predict student potential — or lack of potential — to benefit from enriched educational opportunities. Since standardized test scores do not reveal a child's curiosity, creativity, enthusiasm for learning, motivation, self-esteem, or skills in observation, listening, or problem-solving, the use of these scores for admission to Boston's "high track" risks the exclusion of many students whose capacity for learning is not revealed through such testing.

Moreover, the younger the test-takers, the more biased and less meaningful the test results are likely to be. Test scores in the early grades are more likely to reflect students' familiarity with pencil-and-paper exercises and prior exposure to learning opportunities associated with advantaged social status than to predict with any accuracy either academic aptitude or future achievement. Moreover, developmental growth patterns of young children are so variable that test scores cannot possibly reflect a fixed level of ability or predict academic potential.¹⁹

In addition, test scores for young children risk underestimating the potential of many students, particularly those from the least advantaged groups. A recent study of children in one of Boston's own Early Learning Centers found that students' second-grade performance corresponded more closely to teachers' assessments than to student scores on first grade standardized tests, which were less positive than those assessments. Indeed, second grade teachers unfamiliar with students' prior test performance expressed great surprise that the students they observed as lively and engaged learners in their classrooms had scored below the fortieth percentile on Metropolitan reading tests the previous year.²⁰ These findings suggest not only that the reliance on early standardized test scores to determine selection for Advanced Work Classes is misguided, but also that test results may affect expectations for students on the part of teachers who may accept test scores of young children as an accurate reflection of their "educability" as well as their "ability."

Test manufacturers have never provided evidence that students' scores on standardized tests accurately predict student potential to benefit from enriched educational opportunities. Since such scores do not reveal a child's curiosity, creativity, enthusiasm for learning, motivation, self-esteem, or skills in observation, listening, or problem-solving, the use of these scores for admission to Boston's "high track" risks the exclusion of many students whose capacity for learning is not revealed through such testing.

The inherently exclusionary nature of any "top track" ensures that some students are always locked out. By the same token, the existence of such a program creates the false perception that students who do not meet established entrance criteria, in whatever form they take, are not capable of benefiting from the opportunities offered in that program.

Acknowledging limitations of standardized testing, recent recommendations from within Boston Public Schools have resulted in a commitment to revise Advanced Work Class admission criteria over three years to include third grade test scores, report card grades through the first two terms of third grade, and teacher recommendations. These are certainly positive steps, and a broadening of entrance criteria will perhaps reduce the chances of wrongfully barring some students from these classes. Yet, the inherently exclusionary nature of any "top track" ensures that some students are always locked out. By the same token, the existence of such a program creates the false perception that students who do not meet established entrance criteria, in whatever form they take, are not capable of benefiting from the opportunities offered in that program.

As long as the best resources and state-of-the-art practices are concentrated in classes which exclude many students, the debate regarding selection for Boston's high track circumvents discussion of the injustice that lies at the core of any special program for "top" students. A focus on developing a more equitable selection process ignores the ways in which, by the fourth grade, Boston's high track institutionalizes inequality and exacerbates achievement differences among students. As long as the benefits that characterize high track placements are not extended to all students, selection for such placements can never be fair or just.

Learning "the Justice of Unjust Outcomes"

Touted as a showcase for "state-of-the-art" educational practices, Advanced Work Classes are often used to attract and hold on to the "most able" — and likely most middle-class — students, who might otherwise leave the system altogether. In fact, in some Boston schools that do not offer formal Advanced Work Classes, parents have persuaded the school to create informal "Advanced Classes," often implying they will withdraw their children from the school if such arrangements are not made. Because the parents of students in advanced classes may be both better informed and more vocal than other parents, once their demands are met, schools may continue to employ many less desirable educational practices with limited scrutiny since these practices are more likely to affect children who lack such advocates. In this way, advanced classes may act "as a sort of damage control, enabling schools to engage in a type of educational triage, saving those children for whom mediocre education would not be tolerated by their parents, and allowing the rest of the school population to remain in stasis."²¹

Boston's Advanced Work Classes may also inhibit the development of each school as a community of learners. Given the allocation of the "best" opportunities to a selected group of students, the Advanced Work program may foster a school climate in which the "haves" and "have-nots" come to view each other as "deserving" and "undeserving" or "worthy" and "unworthy" of the best educational opportunities their schools have to offer. As one student in an Advanced Work Class explained, "We get more trips because we do more work. We work harder so we deserve them."

Whether or not they are enrolled in Advanced classes, students' awareness of the advantages of placement in the "high ability" track is acute, even in Boston's early grades, and the superior educational opportunities offered the "Advanced kids" do not escape the notice of students outside the program. For example, third grader Donald knew that Advanced Work Classes existed in his school "for older kids — like fourth graders," and he believed that instruction in those classes was distinctive:

My friend's in Advanced. He's smart, so he's got the hardest teacher in school. They do maps a lot — and dictionary work. He gets books that are real big — as big as dictionaries. He let me hold his book bag, and it was really heavy. His books are real big and hard.

Children we talked with consistently reported that Advanced Work students had "smaller" classes in which teachers who were "nicer" challenged students who were "smarter" with "better" instruction and "more homework" — "everyday" and "even on weekends." Students also perceived that books and materials used in Advanced Work Classes were "bigger," "harder," and "more advanced" than those used in regular classes. They also observed that classrooms for the Advanced students were "nicer [than regular classrooms] and clean."

Students' comments also suggest that they understand that such differential educational opportunities are likely to result in different outcomes. For example, third-grader Patricia proclaimed, "[Advanced Work students] do better than other kids when they leave school. They'll be smarter because they've been taught more."

Boston's allocation of superior learning experiences to students deemed "deserving" may well encourage all students to accept what one researcher has called "the justice of unjust outcomes."²² Given obvious disparities in learning conditions, the implication that students "get what they deserve" does a disservice both to individual students and to the school community as a whole. By defining "excellence" as a commodity to be distributed only to the "worthy" few, Boston schools abdicate their responsibility to employ effective, state-of-the-art practices on behalf of all children.

Extending Assumptions of "Giftedness" to All Students

Underlying the practice of identifying a select group of students as academically talented, placing them in separate classes, and providing them with differential educational experiences is the key assumption that these students require an education that is qualitatively different from "regular" education. For example, much of the "gifted advocacy literature" maintains that gifted children need exposure to opportunities for creative thinking and problem-solving in settings that help them learn independence, self-direction, discipline in learning, and self-awareness. Similarly, teachers of gifted children are advised to have enthusiasm for teaching, a good imagination, a superior education, a sense of humor, sensitivity, respect for students' ideas, and the desire to learn from students as well as teach them.²³

Children we talked with consistently reported that Advanced Work students had "smaller" classes in which teachers who were "nicer" challenged students who were "smarter" with "better" instruction and "more homework" — "everyday" and "even on weekends." Such differential educational opportunities are likely to result in different outcomes. For example, third-grader Patricia proclaimed, "[Advanced Work students] do better than other kids when they leave school. They'll be smarter because they've been taught more."

Certainly, gifted children benefit from high expectations, positive educational experiences, and exemplary teachers. Yet, as Mara Sapon-Shevin asks, "If gifted children need all these things, then what do nongifted children need?"²⁴ In fact, the needs of "regular" children for enrichment are at least equal to those of "advanced" students.

By providing the best educational practices primarily to students identified as "academically talented," Boston's Advanced Work programs create conditions at the elementary level which enlarge the gap between the educational "haves" and "have-nots" with each passing grade. This pattern intensifies in Boston as the creaming of students into Advanced Work Classes in elementary and middle schools sets the stage for the selection process for Boston's examination schools.

As the Supreme Court of the United States affirmed in its 1954 decision in *Brown v. Board of Education of Topeka, Kansas*, "The opportunity of an education...where the state has undertaken to provide it, is a right which must be available to all on equal terms."²⁵ If Boston can offer a challenging curriculum, high expectations, smaller classes, and continuity of teacher-student relationships to students defined as the "most able," it must offer such benefits to all students. The effective practices of Boston's Advanced Work Classes that put some students at an advantage for future educational success must be extended to all students. As one parent suggested in testimony at recent national hearings on public education, "If the regular classroom is not good enough for the gifted, perhaps it is not good enough for those in it either."²⁶ The practices of Advanced Work Classes in Boston provide some guideposts for making "regular" classes good enough for all.

Setting the Stage for Middle School

Our examination of Boston's elementary-level sorting and grouping practices indicates that the foundation for an elaborately stratified system is well-established within a few years. By the end of fifth grade, both within-class and between-class ability grouping practices have shaped a distinct educational hierarchy. At the top of the hierarchy, the 9% of all fifth graders placed in formal Advanced Work Classes experience practices which facilitate their access to knowledge and ease their transition into both advanced middle grades classes and, for many, Boston's examination schools. At the bottom, perhaps up to 35% of all fifth graders have already experienced at least one non-promotion, setting them apart from their age-appropriate grade. Many of these students may be removed even further from their peers through special education or bilingual education placement.²⁷

Consequently, by the time students enter Boston's middle grades, the actual number of students comprising the mainstream — students who have made annual progress from one grade to the next without having been labeled or separated from their peers — has been drastically reduced. At the same time, differences among students have become magnified and institutionalized. As Boston students enter the sixth grade, they bring with them the baggage of their elementary school placements. These placements, as much as individual potential, help set the stage for their middle school experience.

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The Middle Grades: Fixing Ability Levels

In Boston, the stratification of the elementary years becomes more rigid and inflexible in the middle grades, with profound implications for both students' public school experiences and their experiences beyond school. In these grades, the mechanisms for grouping students by ability include the continued reliance on non-promotion as a response to achievement differences, the extension of Advanced Work Classes into the sixth grade, the "clustering" of students by "ability" into separate classes, and the selection of the "best" students for Boston's examination schools. As a result of these practices, middle grades students experience significant differences in curriculum, instruction, class climate, expectations, and guidance. Such patterns have serious ramifications for the futures of all children; for example, researchers have found "that children from high-ability groups generally choose or are assigned to a college preparatory curriculum, and children from low-ability groups typically choose or are assigned to [general or] vocational tracks."²⁸

Non-Promotion in the Middle Grades

As we have noted, many students enter the middle grades in Boston having already experienced either non-promotion or special education placement, or both. In Boston's middle grades, students continue to experience high chances of non-promotion which, while not concentrated in one grade as at the elementary level, are sustained at high levels for the three middle school years. Indeed, grade retention rates more than triple between fifth and sixth grades and peak, for the middle school years, in seventh grade. Moreover, these rates are consistently higher for African-American and Hispanic students than for white or Asian students, putting the former groups at an increasing disadvantage.

Table 3 illustrates this pattern.

Non-promotion in the middle grades seems to operate hand-in-glove with ability grouping practices. As Diana, an eighth grader who had once been labeled a "high level" student, explained:

[Placement] is supposed to be by ability, but I was in "advanced" last year. Then when I was held back, they put me in 8-E. It's stupid. It's really not fair.

Since her own inherent level of ability had not changed, Diana understandably could not comprehend how she could be in an "advanced" class one year and a "dummy" class the next. Angry and hurt, Diana saw her non-promotion combined with her placement in the lowest cluster as a kind of "double punishment."

TABLE 3
Non-Promotion Rates in Boston Middle Grades
(June 1986-88)

	1986	1987	1988
Grade 5	3.6	2.4	2.9
Grade 6	11.2	11.9	9.7
Grade 7	16.9	18.5	14.0
Grade 8	12.8	14.2	10.9

The frequent use of non-promotion in the middle grades creates a group of students who are separated from their age-appropriate peers by two or more years. These students are perhaps in greatest need of the best practices Boston can offer, yet typically they are found in the lowest clusters in Boston's middle schools where the likelihood of their experiencing opportunities to reverse their success-deprived experience are limited.

Non-promotion in the middle grades is likely to intensify stratification and undermine achievement. The frequency of its use contributes to the creation of a group of students who are among the most discouraged, least-served students in the middle grades mainstream — those students separated from their age-appropriate peers by two or more years. These students are perhaps in greatest need of the best practices Boston can offer, yet typically they are found in the lowest clusters in Boston's middle schools where the likelihood of their experiencing opportunities to reverse their success-deprived experience are limited.²⁹

Clustering by Ability

In Boston, many middle schools "cluster" students of perceived similar ability into homeroom-based groups. Once placed in homeroom clusters, many Boston middle grades students remain with their homeroom classmates for the entire year. Regardless of variations in their mastery of different subjects, students typically attend all academic classes with the same classmates, although they may mix with others for gym, art, or music. Decisions about cluster assignments generally rest with the school staff and tend to be permanent; only one student we interviewed reported that she had been moved into a "higher" cluster, and this occurred only after her mother persisted in seeking a change. For most students, reading scores determine their sixth grade placement; math scores have little bearing.

In some Boston middle schools, cluster assignment is highly public as students are sorted and placed into clusters often designated by a number-letter or number-number combination such as 8-A or 6-5. According to this labeling system, the highest sixth grade class might be called 6-A or 6-1, while the lowest eighth grade class might be called 8-F or 8-5. In the sixth grade of some schools, the high-level classes are an extension of the elementary school Advanced Work Class program and are formally designated "Advanced Work Classes." In the upper middle school grades and in schools without formal sixth-grade Advanced Work Classes, such classes are replicated informally — although most students continue to refer to them as "advanced classes."

Districtwide policy in Boston has established that formal Advanced Work Classes extend from fourth and fifth grades at certain elementary schools into the sixth grade at selected middle schools. This sequencing of Advanced Classes dovetails with the grade structure of two examination schools, Boston Latin School and Boston Latin Academy, encompassing grades seven through twelve. Taken together, these programs represent the "top track" in Boston Public Schools.

One consequence of this arrangement is that many of Boston's most successful and academically talented students — as well as their parents — are siphoned away from Boston's middle schools after sixth grade, thus robbing the middle schools of an important constituency which might advocate for school improvement. Yet, the search for a way out of Boston's middle school mainstream, given current middle school practice, is perhaps understandable.³⁰ Indeed, the desire to flee the mainstream is already reflected in the relationship of many of Boston's sixth-grade Advanced Work Classes to their host middle schools.

"Protection" from the Mainstream

In some Boston middle schools, Advanced Work Classes are set apart from the mainstream through their placement in a separate and more appealing physical location "in the other end of the building" or "on a whole other floor," according to students we interviewed. David, for example, suggested that the physical proximity of his sixth grade Advanced class to the seventh grade corridor of his middle school was a sign of its preferred status:

I was in 6A — that was the highest class. We were mixed in with the seventh grade. I mean, our class was where all the seventh grade classes were — on the other side of the building. We had all our classes together — only lunch we had with other sixth graders.

While such a location may communicate a sense of elite status, the physical segregation of Advanced Work students from their peers may also represent an extra step the school takes to protect these students from the perceived "dangers" of the middle school mainstream. Roberto, now a student at Boston Latin School, described these mixed motivations as he understood them while he was enrolled in an Advanced Work sixth grade class in middle school:

Our [class] was really separate and closed off from the rest. It was a self-contained class. Mr. Walker taught us everything except Home Ec. and Sewing. We even had gym all by ourselves, because one day in gym the other kids were really bugging us — they were always bugging us. But we complained, and the principal let us have gym by ourselves. We had the whole gym to ourselves. We got special treatment. Even in woodworking, it was just the four of us guys.... [We were] pretty isolated — behind the auditorium. I'm glad it was separate. It allowed us to concentrate on our work without disturbances.... I guess they didn't want us to be distracted by the other kids. And they wanted to protect us too.

The separation of Advanced Work Classes is almost always interpreted as a sign of privileged status and an indication that students in these classes are "too good" to be near "regular" classes. Indeed, one middle school principal tried to entice a parent we talked with into enrolling his daughter into the school's Advanced Work Class by assuring the parent that the program would be located in an isolated wing of the building and that his daughter would rarely mix with "regular" students. Obviously, the use of segregation as a selling point for any high-status program conveys more than just the value placed on the learning of selected students; it also transmits a negative message about the rest of the school in which the program is located.

"Special Education" for Success

The special status of Boston's high track and the positive learning conditions that characterize Advanced classes result in a less tangible but nonetheless crucial ingredient for success — the message communicated to students in these classes that they are "special." Advanced Work Class students know that they are tracked for Boston's examination schools. Indeed, preparation for Boston's exam schools, particularly Boston Latin School, is both implicitly and explicitly understood as a primary purpose of sixth-grade Advanced Work Classes.

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Roberto, for example, reported that he and his sixth grade classmates were considered "the pick of the crop" at his middle school. He related that staff from Boston Latin School had visited his Advanced Work Class to describe the school and encourage students to take the Secondary School Admission Test (S.S.A.T.) required for admission. He noted that his class was prepared explicitly for exam school admission. "[We] worked really hard. We spent a lot of time studying for the S.S.A.T.," he explained. Likewise, Stephen, now in the eleventh grade at Latin Academy, reported that teachers in his Advanced Work Classes in another middle school, "really drilled us; they helped us prepare for the exam to enter Latin."

Regardless of their placement, all students we interviewed assumed correctly that the academic challenges of Advanced Work Classes give students in them an edge in the competition for examination school seats. Indeed, approximately half of the Advanced Work sixth graders are admitted to either Boston Latin School or Boston Latin Academy in seventh grade, with these students in turn making up one quarter of the seventh graders enrolled in those schools. In short, future academic opportunities are vastly enhanced for students enrolled in Advanced Work Classes.³¹

Clustering, Labeling, and Identity

That clusters are organized by presumed ability is patently obvious to the middle grades students we interviewed. Explained sixth-grader Rory, "The smartest kids are in 6-1 and it goes down from there. 8-1 is the smartest, oldest kids. 6-5 is pretty terrible."

That non-Advanced Work clusters are also organized by presumed ability is patently obvious to the middle grades students we interviewed. Explained sixth-grader Rory, "The smartest kids are in 6-1 and it goes down from there. 8-1 is the smartest, oldest kids. 6-5 is pretty terrible." Likewise, Tammy related that in the seventh grade at her school, "the smartest [students] are in 7-A. The special kids are in 7-F. The others are in the middle. [My homeroom] is an advanced class. There are different homerooms for slower kids."

Even students in schools that do not use such an obvious method of labeling homeroom clusters were no less certain that their "ability" had determined their cluster assignment. Asked to speculate about how school staff had determined homeroom groupings, these interviewees typically responded, "By how smart you are," or "By how good you are — your marks." As Melina put it, "If you're slow, you're in a slow class," or as Luther noted, "Some homerooms are for smarter kids — advanced kids — some are for bilingual kids."

Other students suggested that factors besides "ability," particularly their attendance or discipline record, might contribute to their placement. Kathleen, for example, reported, "I was in the lowest [cluster] because I didn't go to school until October....I was behind from the start." Only a few students said they did not know the criteria governing homeroom and cluster assignments, although one noted, "We were all in RECAP. [It was probably] to keep us together."³²

Such clustering by "ability" may have significant and even devastating effects. Indeed, research has identified this kind of ability-grouped class assignment as the most potentially harmful form of ability grouping.³³ Clustering in Boston appears to set the stage for pronounced differences across clusters affecting curriculum and instruction, classroom climate, expectations, and support and guidance. These differences occur both between formal Advanced Work Classes and mainstream classes and among "regular education" classes themselves.

Curriculum and Instruction: "We Just Sit There"

Students we interviewed from Boston's middle grades reported startling differences from cluster to cluster in the content and pace of their learning and opportunities for enrichment provided by their school. In the students' eyes, the pace of instruction in the different clusters parallels the identification of students in the clusters as "faster" or "slower" learners. According to Marisol, for example, "8-E would be on the seventh grade level [in math] and 8-A on the ninth," while in science "[8-A] might be three chapters ahead of [8-E]." Likewise, Jennifer reported that while students in 7-A were studying geometry, students in 7-F might be working on basic computational skills.

Most students also believed high clusters were provided with more demanding classwork, more trips, and more opportunities for library use. For example, Tammy, in the 7-A cluster in her middle school, reported, "We can use the library before school and after school, and we have a special library period on Thursday." By the same token, students denied these opportunities know well that they are being short-changed. As Keesha explained:

Students in the high cluster go [to the library], I think, last period every Monday for the whole period. We don't go to the library now; we go to word processing. It's o.k., but I'd like to go to library.

Likewise, eighth grader Linda observed, "8-A and 8-B are the only levels that get to go on trips. It makes me mad." Students also consistently noted that "only the advanced kids get to learn other languages;" asked if her school offered language classes, Diana responded, "Yes, we can take Spanish," then corrected herself saying, "I mean the more *advanced* students take Spanish."³⁴

In addition, students in the "high" clusters, like their counterparts in formal Advanced Work Classes, noted that the need to prepare for the November examinations for Boston's selective high schools justified the separation of their classes from others. Reported Zaida of her 8-A cluster: "They didn't want to get the smart kids mixed up with the other kids. They had to give us special classes to prepare for exams for Latin and Tech." Such activities reinforce students' positive academic and general self-perceptions. "I liked being in [8-A]," explained Zaida. "It was a status thing. Everyone knew you were smart."

In contrast, our interviewees described very different practices in the lower clusters. Students in these classes generally described teacher-centered instruction that varied little from day to day. Moreover, these students typically described their assignments as "easy," "not hard," and "boring," and over and over, we heard such students describe classes where teachers and students alike "just sit there."

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According to Charles, "[Our eighth grade social studies teacher] used to just sit there and lecture us. He'd write things on the board and tell us to copy them in our notebooks." Likewise, as Keesha described her seventh grade math class:

All [the teacher] does is keep on talking. He doesn't let us do the work. He just stands at the board and talks and talks and does it all on the board. We never get to go to the board. He used to call us up at the beginning of the year, but not any more. We just sit there. I want to go to sleep.

Similarly, Anna in 8-E reported her social studies teacher "talks us to sleep," and "average" sixth-grader Rory noted, "[Our science teacher] just talks and we have to sit there. No experiments or anything." Finally, Andrea echoed this theme in describing her seventh grade language arts class:

We just sit there and do a whole bunch of [workbook] pages. It's not hard, just boring. The teacher doesn't even care. As long as we're quiet, he doesn't care if we do good. If he doesn't care, why should we?

Every one of our interviewees from low clusters related school experiences largely dominated by passive learning tasks often consisting of little more than the completion of "packs," worksheets, or "baby stuff — books with big-size words." By comparison, whereas students in higher clusters also described mainly teacher-centered classrooms, they perceived both curriculum and instruction in these classrooms to be superior.

Such comments, of course, do not mean that students in the lower clusters are never exposed to learning designed to challenge and stimulate them. But every one of our interviewees from low clusters related school experiences largely dominated by passive learning tasks often consisting of little more than the completion of "packs," worksheets, or "baby stuff — books with big-size words." By comparison, whereas students in higher clusters also described mainly teacher-centered classrooms, they perceived both curriculum and instruction in these classrooms to be superior. Indeed, of all the middle school students we talked with, only Tammy in 7-A expressed any real excitement about her current educational experiences. "You learn a new thing every day!" she exclaimed.

Classroom Climate: Teacher-Student and Student-Student Interactions

Students placed in different cluster levels also reported very different learning climates in their classes. Indeed, many students vividly described how student and teacher attitudes and behavior differed among clusters, contributing to classroom climates that varied from those that challenged and nurtured student learning to those that were indifferent or hostile towards it.

While Rory, a student in the 6-3 or "average" ability cluster, described his classmates as "average," perhaps reflecting his acceptance of the school-assigned label, few other students were so neutral. Frequently, students in the "low ability" clusters described their classmates as "troublemakers" or "punks," and their behavior as "fresh," "mean," "rude," or "wild." Jeannette, for example, viewed her 8-E classmates as "immature" and explained, "They would yell and scream in class and never showed the teacher any respect." She speculated:

[My homeroom] was probably the worst because it had the lowest kids...A lot of kids would flunk and get all F's, and they didn't care. They'd show me their report cards with all F's and just laugh. I used to tell them, "Don't you want to do better? To get better grades and graduate?" They'd laugh...They don't even care, swearing back at the teachers, hooking classes....

From the perspective of students in the "high ability" clusters, the "low ability" clusters appeared to consist mainly of "tough kids" who "like to start fights." For example, recalling her middle school, Sandra noted:

There was a class for, like, "troubled kids" and "trouble makers." They picked on us because we were smart. They had a special class, but I don't think they were really "special ed" kids. They just had problems.

Indeed, some of these "problems" include extensive experience with school failure and grade retention. For example, Joseph described how one 16-year-old in his seventh grade cluster had become so demoralized she had virtually given up on school: "She says, 'Why should I work? I don't want to be in the eighth grade. I like it here. I'm not going to work.' She won't graduate — ever." Such examples illustrate how non-promotion coupled with the use of ability-group clusters can critically undermine students' sense of commitment to their schooling.

Clearly the dynamic between clustering practices and student motivation, attitudes, and achievement is a complex one. But in clustering students of similar "abilities" together, Boston middle schools communicate expectations for student achievement that severely limit the chances of academic success for students in the low clusters where teachers and students alike often seem to have given up on learning. As Tamara described her "low-ability" cluster:

Nobody ever does the homework. So now they don't give us any 'cause nobody does it. *They* don't care. *They* aren't losing anything. It's less work for them. It's easier for them if they don't give us work, so they don't...Mr. James gives everyone a B minus, he never even reads our work, just gives us all a B minus on everything.

Other students speculated that the apparent indifference of their teachers might be the product of a more intense feeling — fear. As Donna surmised:

I think the teachers were afraid of the students. Kids would always be cutting classes, smoking pot in the bathrooms. Some had weapons. The teachers never did anything about it.

Still other students suggested that when teachers did "do something" to discipline students, their actions were overtly hostile. Reported Keesha, "[Our reading teacher] threw a book at a kid, and he grabs you by the shirt when he kicks you out." The climate of indifference, fear, and hostility engendered in such classes dramatically erodes students' chances for success in them.

Clearly the dynamic between clustering practices and student motivation, attitudes, and achievement is a complex one. But in clustering students of similar "abilities" together, Boston middle schools communicate expectations for student achievement that severely limit the chances of academic success for students in the low clusters where teachers and students alike often seem to have given up on learning.

Simply stated, most students we talked to perceived and described "high ability" classes as more positive learning environments than "low ability" classes. In the same school as the class Keesha described, several students in a "high-average" cluster characterized their classes as "interesting" places where students experience "some fun stuff," and their classmates as "all good" or "mostly good kids." According to Edward, "We respect the teacher more...Other [clusters] are more noisy." Edward also described his homeroom/language arts teacher as "a nice guy," and he reported that this teacher "sometimes stops the class to give speeches, like about drugs and problems. He helps us, and he wants us to do good." Likewise, Roberto noted that in his sixth grade Advanced class:

We worked hard, but we had fun too. We played Equations and [had] Scrabble tournaments, and we were given free time after we did our work. We enjoyed it a lot. I wasn't out one day in sixth grade.

Student Attitudes, Expectations, and Aspirations

Which comes first? Do students who do well invite better teaching and create better learning conditions, or do better teaching and learning situations created by adults in our schools invite better performance? The relationship is undoubtedly reciprocal, but our interviews and research suggest that almost invariably, "high" placements correspond with students' positive perceptions of themselves and their classmates, and "low" placements with negative perceptions of self and others. And such self-perceptions are likely to affect student performance.

Diana, for example, suggested that her cluster placement had a profound influence on her attitude and achievement: "I liked it. I was better," she said of her experience in her 8-A class last year. "I was more respectful to the teachers. I felt smarter." Once retained in grade and demoted to 8-E, however, Diana's confidence and self-image were shaken.

As Richard deLone describes this phenomenon, children labeled and placed in low-level classes "accept and internalize the stigma, coming to view themselves and their potential much as society and its agent, the schools, view them."⁵⁵ Placement decisions may thus have a powerful impact on student expectations and aspirations. Indeed, young adolescent students we talked with clearly saw the connection between advanced classes, Boston's examination schools, and a college education. "High ability" students, whether in formal Advanced Work Classes or high-level clusters, often aspired to exam school admission as a springboard to college. Indeed, James reported that his Advanced Work Class "was like prep for Latin and Latin is like prep for college....It's like a screening process."

But, just as some students are screened into the high track, many more are screened out. These students then languish in the low-level clusters of the mainstream, their hopes and dreams for the future at odds with their awareness of their schools' low expectations for their achievement. When we asked students from low and average classes if *they* would like to attend exam schools, most said they would not — that the work there would be much too hard for them and that they "just knew" they wouldn't get in.

Just as some students are screened into the high track, many more are screened out. These students then languish in the low-level clusters of the mainstream, their hopes and dreams for the future at odds with their awareness of their schools' low expectations for their achievement. Indeed, many students we talked to are so persuaded that higher level clusters are for "better" students that they may screen themselves out of higher level courses even when they have the opportunity to take them.

By the time they reach middle school, many Boston students seem to have accepted the notion communicated through school ability grouping practices that intelligence is fixed and immutable and that they simply do not belong in the advanced classes. Indeed, many students we talked to are so persuaded that exam schools and higher level clusters are for "better" students that they may screen themselves out of higher level courses even when they have the opportunity to take them. Asked whether they might try to enroll in upper level courses, students frequently belittled their own potential: "I'm not that good," said Russell, and Andrea confessed, "My grades aren't good enough." Explaining why she was not in "advanced" classes, Jennifer reported, "It's a higher level. I couldn't ever be in them," and Charlene said simply, "I wasn't that smart."³⁶

Despite their often negative assessments of their academic potential and their suitability for high track placements, however, many middle school students we talked with sustained high aspirations for their futures. Only one student we interviewed did not intend to graduate from high school. Our interviewees expressed interests in careers as teachers, nurses, pediatricians, dentists, scientists, social workers, legal secretaries, police officers, accountants, bankers, and real estate brokers — all fields requiring significant training beyond the high school level. In fact, the overwhelming majority of students indicated they aspired to higher education, despite the reality that only two out of ten students who enter ninth grade in Boston will attend college or junior college.³⁷

In many cases, however, the gap between the lives students aspire to and the expectations communicated to them by their schools is enormously wide. Moreover, the lower students are placed on the educational hierarchy, the wider the gap is likely to be. And sadly, that gap is too frequently closed, not by schools' raising their expectations for students' futures and adopting practices that reflect a willingness to invest in those futures, but by students' slowly giving up their aspirations as they realize that schools have not provided them with the means to realize their dreams.

The gap between the lives students aspire to and the expectations communicated to them by their schools is enormously wide. Moreover, the lower students are placed on the educational hierarchy, the wider the gap is likely to be. And sadly, that gap is too frequently closed, not by schools' raising their expectations for students' futures and adopting practices that reflect a willingness to invest in those futures, but by students' slowly giving up their aspirations as they realize that schools have not provided them with the means to realize their dreams.

The Differential Allocation of Support and Guidance

As we have noted, many students in "average" and "low" clusters in Boston middle schools remain optimistic about their futures, perhaps because they receive significant encouragement from family members in pursuing their goals. However, few students reported that their teachers or principals even discussed future educational or work options with them. Nor did they indicate that anyone at their school routinely helped them select courses, extra-curricular activities, or summer jobs which might further their academic and career goals. When asked what advice and guidance they had received from school staff, most students simply replied, "Nothing." As Richard reported, "They just say, 'Good luck...if you ever pass.'" And Jeannete remarked, "They don't care. They just want to get you through without any problems."

Students reported receiving equally inadequate advice from their guidance counselors despite the fact that middle school guidance staff are responsible for "ensuring that students have been informed of the Boston Public Schools' secondary programs and the implication of course selection for career development."³⁸ From the point of view of most students we interviewed, the guidance counselor's role in their schools consists of facilitating school transfers, helping students obtain working papers, counseling them when they "hook" school, or simply "punishing kids." Cassandra, for example, described her one encounter with her middle school guidance counselor: "I came to school so late I had to go see him. He just said, 'Come to school,' and 'Don't cut.' He didn't help me much." Indeed, the overwhelming majority of our interviewees did not even know their guidance counselor's name.

Students in "higher" clusters seemed to benefit from somewhat more guidance from the adults in their schools than did other students. For example, Tammy reported that many of her teachers, including her gym teacher, had urged her to go to college and had advised her to take pre-college courses offered to Boston students at the University of Massachusetts Harbor Campus as well as biology, chemistry, and algebra in high school. Tammy also reported that her school's guidance counselor "gives you help on the Latin test and tells you how to prepare for it," a role also recalled by students now enrolled in Boston's examination schools.

All middle school students we interviewed were well aware of the value of graduating from high school and attending college, and many receive significant encouragement from family members in pursuing their goals. But our interviews suggest that the information and encouragement students need to make their aspirations a reality are not distributed equally to all groups.

All middle school students we interviewed were well aware of the value of graduating from high school and attending college. But our interviews suggest that the information and encouragement students need to make their aspirations a reality are not distributed equally to all groups. Yet students do not ask for much from school staff in this area. They merely suggest that school staff provide them with information, advice, and encouragement. Charlene, for example, suggested middle schools could "have a classroom full of information about jobs. Maybe have a lawyer, a doctor, a nurse, a pediatrician, a teacher there so you could talk to them and ask them questions." Likewise George proposed, "We could have career fairs. I think we ought to have a career day. We could each pick a job and write an essay about it, and talk to people that do it." Corinne summed up the suggestions of most: "Talk to the kids," she said. "Find out what their goals are, and encourage them. Care about them."

In a recent report, author Sara Lawrence Lightfoot of Harvard University and a committee of African-American educators have underscored the critical importance of human relationships to learning. According to this report:

Neither teaching nor learning is a purely mechanical process. Few children are motivated to inquire into the wonders of the world around them if they are not aided by a warm and caring relationship with another human being.³⁹

Sadly, our interviews suggest that our schools may apportion such relationships, as they do good instructional and curricular opportunities, differentially to students according to their so-called "ability" or "worth."

Creating a Dual System in Boston's Middle Grades: The Middle Schools and the Exam Schools

While tracking intensifies *within* schools at Boston's middle level, tracking *across* schools, through the examination school system, institutionalizes unequal access to knowledge beginning in the seventh grade. In a school system that "creams off" nearly 20 percent of all seventh graders for placement in examination schools, Boston middle grades are already structured according to a two-tiered system. Seventh and eighth graders who remain in the middle schools are, in effect, already on a lower track that crosses all schools while those who enter examination schools are exposed to advantages largely unavailable to those left behind.

White and Asian students are dramatically overrepresented in Boston's examination schools. In seventh grade, approximately 90% of all white and Asian students are enrolled in Boston Latin School and Boston Latin Academy. In contrast, only 14% of all African-American and 8% of all Hispanic seventh graders are enrolled in these schools. These enrollment patterns meet court-established guidelines which stipulate that admission to examination schools shall reflect an enrollment of 65% white and Asian students combined, leaving the remaining seats for African-American and Hispanic students.

Admission to the Latin schools' seventh grade operates much like admission to a private school. Indeed, many students applying to the Latin Schools are already attending a private school or are also applying to private schools which they may attend in the event they are not accepted to either of the Latin schools. This pattern is encouraged by active recruitment of applicants on the part of examination schools staff at private schools and neighborhood forums attended by parents whose children are enrolled outside of Boston Public Schools. Given this practice, admission to exam schools serves as a reward allocated to students not only on the basis of pure achievement but also according to prior educational opportunities enhanced by the advantage of attendance at a private school or at a school in a suburban system such as Brookline.

To apply to examination schools, students must take the S.S.A.T., a standardized test designed by the Educational Testing Service (ETS) and administered annually in November at sites around the city. Middle school principals are responsible for providing information about the test to all sixth grade students, and announcements are also made through local media. Information is available only in English, however, and if a student misses the application deadline, no second chance is available for two years. Final selection is based on a rank order of eligibility for each school determined by combining student S.S.A.T. scores with a grade-point-average based on grades received for the first half of sixth grade in reading, mathematics, and English according to specific equations designed by ETS.

While tracking intensifies *within* schools at Boston's middle level, tracking *across* schools, through the examination school system, institutionalizes unequal access to knowledge beginning in the seventh grade. Seventh and eighth graders who remain in the middle schools are, in effect, already on a lower track that crosses all schools while those who enter examination schools are exposed to advantages largely unavailable to those left behind.

Complicated admissions procedures are designed to select students defined as the "most able," in the narrowest sense, to compete in what are widely known as Boston's college preparatory schools. If students require special education or bilingual support, their chances of admission to any of Boston's examination schools are virtually non-existent. Students' need for individualized special education services or bilingual education should not necessarily preclude their participation in an academic program designed to prepare students for higher education.

These complicated admissions procedures are designed to select students defined as the "most able," in the narrowest sense, to compete in what are widely known as Boston's college preparatory schools. If students require special education or bilingual support, their chances of admission to any of Boston's examination schools are virtually non-existent. For example, in 1985-86, only 15 special education students were enrolled in Boston Latin School, 24 in Boston Latin Academy, and 33 in Boston Technical High School, representing only 1.5 percent of all students attending those schools. Bilingual students occupied even fewer seats. In 1985-86, 16 bilingual students were enrolled in Latin School, 8 in Latin Academy, and 28 in Boston Tech; these students represented only 1.1 percent of all students in exam schools, and a majority of them were Asian.

Table 4 details these findings.

Students' need for individualized special education services or bilingual education should not necessarily preclude their participation in an academic program designed to prepare students for higher education. Yet such is largely the case in Boston's examination schools. Such exclusion of particular groups of students from Boston's highest track, institutionalized by the time students are twelve years old, should alarm anyone who believes in equal educational opportunity and democratic schooling.

TABLE 4
Boston Public Schools: Examination School Special Education
and Bilingual Enrollment (1985-86)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
BOSTON LATIN ACADEMY					
# Special Education	13	8	2	1	24
Special Education Rate	2.3	1.1	2.7	0.6	1.6
# Bilingual	1	2	1	4	8
Bilingual Rate	0.2	0.3	1.4	2.4	0.5
BOSTON LATIN SCHOOL					
# Special Education	7	6	0	2	15
Special Education Rate	1.2	0.5	0.0	0.6	0.7
# Bilingual	0	1	9	6	16
Bilingual Rate	0.0	0.1	5.6	1.8	0.7
BOSTON TECH. HIGH					
# Special Education	13	14	3	3	33
Special Education Rate	2.4	5.9	3.2	1.2	3.0
# Bilingual	0	0	8	20	28
Bilingual Rate	0.0	0.0	8.6	8.3	2.5

Differential Access to Knowledge

In Boston's middle grades, students' access to knowledge is dramatically dependent upon their school placement. Students assigned to an ability cluster typically take all courses with the same group of students. Therefore, an analysis of enrollment in mathematics courses in the middle grades serves as an indication of students' differential access to knowledge in general. Mathematics, of course, is not the only "high status" knowledge area students expect to learn in public schools. However, enrollments in this subject illustrate how placement decisions affect access to knowledge in the middle grades and how such decisions work as a gate to future educational opportunities.

A review of student placement rates graphically demonstrates that by the seventh and eighth grades, Boston has established a two-tiered system which offers two distinctly different routes to knowledge. On one hand, Boston Latin School and Boston Latin Academy offer only Math 7 to seventh graders (and to a handful of eighth graders), and either Algebra 1 or Algebra 1 Honors to eighth graders. These courses are designed to prepare students to progress along a mathematical track which may, if they choose, include higher mathematics courses such as calculus.

Table 5 summarizes these data.

TABLE 5
Student Placement Rates in Math Courses in Boston Middle Grades
Examination Schools and All Other Schools (1988-89)

	GRADE 6	GRADE 7		GRADE 8	
	All Schools	Exam School	Non-Exam	Exam School	Non-Exam
Grade Level or Higher	67.4	100.0	67.2	99.6	61.5
In Grade Level Course Below Grade	0.0	0.0	0.6	0.4	1.6
General Math	14.5	0.0	14.3	0.0	16.5
Basic Math 1 and 2	1.4	0.0	1.9	0.0	1.9
All Others (Basic Skills, Chapter 1, Career Math, Math Topics, Math Review, Math Lab)	16.7	0.0	16.1	0.0	18.6

* "Grade Level" is defined as Math 6 in Grade 6, Math 7 in Grade 7, and Math 8 in Grade 8. However, Math 8 is not offered in exam schools. "Grade Level" in exam schools in eighth grade is considered to be Algebra 1 College or Algebra 1 Honors.

By the seventh and eighth grades, Boston has established a two-tiered system which offers two distinctly different routes to knowledge. On one hand, Boston Latin School and Boston Latin Academy offer courses designed to prepare students to progress along a mathematical track which may, if they choose, include higher mathematics courses such as calculus. In contrast, this route to higher mathematics is virtually foreclosed to most students enrolled in Boston's middle schools in seventh and eighth grade.

In contrast, this route to higher mathematics is virtually foreclosed to most students enrolled in Boston's middle schools in seventh and eighth grade. Although the Dearborn, King and Lewenberg middle schools are slated to begin offering an algebra program in 1989-90, middle grades students excluded from Boston's exam schools have traditionally been denied access to algebra.⁴⁰ Instead, courses offered students outside of exam schools suggest both the increasing differentiation among groups of students and the remedial nature of many mathematics courses available in middle schools. Such courses include General Math, Basic Math 1, Basic Math 2, Basic Skills Math, Chapter 1 Math, Career Math, Math Topics, Math Review, and Math Lab. Indeed, in 1988-89, only one of the 21 middle schools — the Shaw Middle School — placed all students only in courses with grade-level labels.

Moreover, while exam schools show little difference in the seventh and eighth grade rates of students enrolled in grade level math courses, a shift in placements begins at this point in the middle schools. First, enrollment on grade level drops nearly six percentage points between these two grades. At the same time, enrollments in General Math and the low-status math courses increase.

Such a shift is both curious and alarming. No corresponding increase in special education enrollment takes place, eliminating one possible explanation. But such a shift may reflect the point at which schools begin to sort "regular" education students more decisively into lower ability groups rather than adapt instruction and curriculum and mobilize extra support to ensure that all students will be exposed to valued knowledge. At the same time, the exit of stronger students from the system may further depress overall performance levels in individual schools.

It is also worth noting different placement patterns by race. While almost 40% of all students are enrolled below grade level by eighth grade, this percentage is highest for Hispanic and white students who are least likely to be enrolled on grade level.

Table 6 details middle grades mathematics course enrollment data by race.

TABLE 6
Placement Rates in Mathematics Courses by Grade and Race in Non-Exam Middle Grades (1988-89)

	AFRICAN-AMERICAN			WHITE			HISPANIC			ASIAN			ALL		
	6	7	8	6	7	8	6	7	8	6	7	8	6	7	8
Grade Level or Higher	66.2	68.7	62.4	74.1	73.4	59.9	57.2	56.3	57.7	87.5	76.2	71.5	67.4	67.2	61.5
Grade Level Course Below Grade	0.0	0.4	1.1	0.0	0.1	1.0	0.0	0.3	0.7	0.0	4.6	6.2	0.0	0.6	1.6
General Math; Basic Math 1 and 2	15.3	14.6	18.5	11.6	13.3	15.7	22.6	22.1	22.4	11.5	16.9	15.0	15.9	16.2	18.4
All Others (Basic Skills Math, Chapter 1, Career Math, Math Topics, Math Review, Math Lab)	18.5	16.5	18.0	14.5	13.1	23.4	20.2	21.4	18.1	1.0	2.4	7.3	15.7	15.1	18.6

The patterns revealed in these data are cause for concern. While we do not have access to the individual student records which would allow us to examine these patterns more closely, the course enrollment rates in Boston's middle grades strongly suggest that the seeds of inequality sown in the ability grouping practices of the elementary grades flower in the whole-class stratification of the middle grades. Such patterns become institutionalized further in the two-tiered examination school-middle school system. Moreover, while the decision to allocate access to knowledge differentially among students in the different clusters and schools may be rationalized in terms of individual "merit," we should make no mistake that it works to foreclose the future options of many students and sets the stage for further tracking at the high school level.

If each Boston middle school were to provide excellent instruction, a challenging curriculum, and a positive climate for learning to all students, perhaps the need for such a two-tiered system would be less obvious. Indeed, just as some Boston parents whose children have positive experiences in their schools turn down invitations to Advanced Work Classes in another school, preferring the stability and positive climate of a familiar school to an "advanced" program, we believe many parents of young adolescents would prefer an academically effective, developmentally appropriate middle school to an examination school. Currently, however, the limited opportunities in the middle schools combined with the "now-or-(possibly)-never" aspect of exam school admission in the seventh grade provide little incentive for eligible students to remain in even the most attractive Boston middle school.

Ability Grouping, Exemplary Middle Schools, and Developmentally Appropriate Practices

Boston's current middle-level tracking practices are in direct conflict with state-of-the-art practice in many exemplary middle schools across the country. Indeed, University of Florida professor Paul S. George conducted a survey of 154 middle schools reputed to be the best in the nation and, with a 63% response rate, found that "virtually all of the respondents organized the schools so that each student was a member of a *heterogeneously grouped interdisciplinary team*."⁴¹ Survey responses further indicated that:

- 33% of staff members in exemplary middle schools completely reject the practice of tracking and provide for heterogeneous grouping in virtually all classes on all teams;
- For the middle schools that do group students by ability, the most frequent practice is to restrict such grouping to one or two subjects — commonly reading or math;
- Principals of untracked schools believe the absence of tracking and use of mixed-level grouping contribute to opportunities for "increased positive student social interaction, the ability to respond to a variety of abilities and interests, increased student-student cooperation, [and] the encouragement of positive modeling (leadership) from students. Eighty-five percent of this group believed that heterogeneous grouping was responsible for important improvements in students' self-esteem."⁴²

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Though unfamiliar with the research, several middle grades students we interviewed recognized that heterogeneous student groupings were an alternative way schools could meet diverse needs while simultaneously promoting positive social relationships and higher achievement for all students. Asked if different skill levels would pose problems in a mixed-ability class, Keesha explained, "They could just give the slower kids extra help, that's all."

Boston's continued use of inflexible tracking in the middle grades also disregards knowledge about the developmental characteristics of early adolescence. Between the ages of 11 and 15, young adolescents experience rapid physical, social-emotional, and cognitive growth second in depth and breadth only to that of the first three years of life.⁴³ Such development occurs at a pace that varies dramatically for each individual child and can be extremely erratic; thus, young adolescents who can grasp only concrete learning tasks one day can show flashes of abstract brilliance the next. Rigid clustering by ability is unlikely to respond to these fundamental realities of early adolescent development.

Though unfamiliar with the research, several middle grades students we interviewed recognized that heterogeneous student groupings were an alternative way schools could meet diverse needs while simultaneously promoting positive social relationships and higher achievement for all students. Eighth grader Charlene, for example, proposed that students be grouped in mixed-ability clusters so "the smart kids might be able to help the other kids." And Keesha maintained: "I think [group placement] should be mixed — it's fairer." Asked if different skill levels would pose problems in a mixed-ability class, Keesha explained, "They could just give the slower kids extra help, that's all."

Restructuring the Whole Middle School for Diversity

The clustering of students by "ability" within schools and the implementation of Boston's Advanced Work Program and examination school system as separate subsystems in the middle grades, entrench a pattern which benefits the few at the expense of the many. And as effective as these "advanced" programs may be, they may stand in the way of an improvement effort that involves the whole school. Indeed, one study of effective middle schools has pointed out that offering a few good programs within a school is simply not sufficient:

Excellent programs can be found in terrible schools. It is possible that the accretion of good programs in weak school structures further weakens rather than strengthens schools. Children attend schools, not individual programs....The school must be the unit of change.⁴⁴

As part of its restructuring effort, Boston must reconceptualize its approach to middle grades education within a framework of social justice and equal educational opportunity for all students. Such an effort must be guided by a vision of schools that offer all students access to knowledge through state-of-the-art practices that have been demonstrated effective with mixed-ability groups.⁴⁵ The best practices now offered some middle grades students must become standard operating procedure for all students in Boston's middle schools.

High School Tracking: Reaping What We Sow

Given the sorting, grouping, and placement practices of Boston's elementary and middle schools, Boston students arrive in ninth grade not equally prepared as the standardized curriculum would have us believe, but with extreme disparities in prior exposure to valued information and knowledge, experience with school success, and expectations for further achievement. Some of these disparities may reflect differences that occur normally among students in many urban school systems. However, many of these "natural" differences are exacerbated by the differential schooling experiences we have described.

At the high school level, Boston's tracking system further exaggerates differential access to knowledge depending on students' school assignment. Within high schools, school-based sorting mechanisms of non-promotion and course assignment establish further pronounced differences and may move students backwards on the road to knowledge. Such decisions regarding students' exposure to various curricular areas have powerful impact on students' future opportunities including their chances of admission to and graduation from college.

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The Impact of Districtwide High School Stratification

Boston's system of assigning students to high schools and of matching students to courses or programs appropriate to their "ability" encompasses a wide range of formal and informal rules and procedures. The city currently employs three distinct assignment procedures. The first is selection by "merit" through an examination-based application to ninth grade in Boston's three examination schools — Boston Latin School, Latin Academy, and Boston Technical High School.⁴⁶ The second is selection by lottery for Boston's "magnet" schools — Snowden International (Copley) High, English High, Madison Park High, Umana School (including seventh and eighth grades), and Boston High, each of which is said to have a unique program designed to attract students from all neighborhoods and to promote desegregation. The third is assignment to a district high school within a smaller "zone" of the school district.⁴⁷

Despite the apparent array of high school choices, however, Boston high schools tend to be clustered in a manner reflecting the two-tiered system institutionalized in the middle grades. The tier comprising the "selective" high schools serves students who, by definition, have experienced academic success in the past, many in private, parochial, or suburban school settings. These students are less likely to need special education or bilingual education and are more likely to be white and economically advantaged.⁴⁸

The lower tier includes Boston's district high schools and, to some extent, the magnet high schools, and enrolls students with fewer educational and social advantages. In some schools in this tier, combined enrollment of African-American and Hispanic students approximates 90%, nearly 50% greater than the corresponding enrollment for high schools overall. This pattern suggests high concentrations of less economically advantaged and less politically empowered students in these schools. Moreover, many of these students are especially vulnerable because of learning needs requiring special education or bilingual education.

Table 7 presents enrollment rates for Boston high schools and illustrates the concentration of vulnerable student groups in particular schools.

Non-Promotion in Boston High Schools: The Distribution of Success and Failure

Perhaps not surprisingly, student enrollment patterns in Boston high schools are reflected in their non-promotion patterns; that is, schools in the upper tier, enrolling primarily students with a history of school success, tend to have low non-promotion rates, while those in the lower tier, with large numbers of students who have already experienced school failure, tend to have higher non-promotion rates. Indeed, of the 1,058 Boston ninth graders not promoted in June, 1988, 986 (93%) attended either citywide magnet schools or district high schools.

Table 8 presents non-promotion rates in Boston high schools by school.

As we have noted, non-promotion in any grade has little positive effect on student achievement and self-esteem and may undermine student engagement in school, setting the stage for dropping out. One national study has reported that the chances of dropping out increase 40% for students retained in one grade, and 90% for students retained twice.⁴⁹ A more recent study in Chicago high schools determined that students enrolled below their age-appropriate grade had higher chances of dropping out even when their reading scores exceeded those of their peers.⁵⁰

In Boston, the correlation between non-promotion and dropping out is dramatic. Boston's most recent study of dropout rates reports that 70% of first-time ninth graders identified as being "two years overaged" (409 out of 585) eventually dropped out of school, compared to 34% of students not in this "two years overaged" category. Such data confirm that grade repetition prior to high school is a "high risk factor" for dropping out in Boston.⁵¹ Moreover, students held back in Boston's ninth grade are three times more likely to drop out than students promoted to tenth grade: 62% of ninth graders retained in grade dropped out compared to 21% who were promoted.⁵²

Given these known correlations, non-promotion at the high school level can have enormous impact on a student's educational fate. However, the consequences of grade retention are somewhat different from one track to the next. While relatively few students fail in Boston's selective schools, those who do are often afforded a "second chance" in a district high school. For example, one parent we talked with reported his daughter had been offered the choice of repeating her grade at Boston Latin or returning to her district school in her age-appropriate grade.

In contrast, high schools not in the "top track" offer little in the way of a "second chance" for students who fail a grade. At best, these schools may offer "special" classes for "repeaters" or, after tenth grade, referral to one of Boston's few alternative schools. More commonly, non-promotion in the district high schools, the schools-of-last-resort, acts as the ultimate sorting mechanism, separating those who will stay in school from those who will leave school altogether. In short, patterns of non-promotion in Boston's high schools suggest that the two-tiered system ensures not only that, for the most vulnerable students, failure is more likely, but also that the stakes of such failure are much higher.

TABLE 7
Selected Enrollment Rates for Boston High Schools (1987-88)

	AFRICAN-AMERICAN	HISPANIC	SPECIAL EDUCATION	BILINGUAL
Boston Latin Academy*	36.5	5.9	2.4	0.5
Boston Latin School*	25.4	7.1	0.8	0.2
Boston Technical High	47.8	10.0	4.1	2.8
Brighton	29.8	23.2	18.1	31.0
Charlestown	33.3	19.8	16.9	35.6
Dorchester	71.3	20.0	24.9	15.6
East Boston	18.4	6.4	17.9	1.9
English	64.2	20.0	15.2	34.8
Hyde Park	79.3	1.0	22.2	0.1
Jamaica Plain	49.3	39.5	20.5	19.3
Jeremiah Burke	80.3	10.3	25.2	0.0
South Boston	36.3	17.6	18.1	14.2
Boston High	55.2	26.1	25.3	10.1
Snowden (Copley)	54.9	12.2	18.6	0.0
Madison Park	67.5	22.2	28.3	18.0
Umana*	58.0	13.4	17.5	1.7
West Roxbury	57.7	7.1	18.6	2.5
Boston High Schools	50.0	15.2	16.9	12.4

* Latin Academy, Latin School, and Umana data reflect grades 7-12; rates are therefore slightly different than had data been available for grades 9-12 only.

The consequences of grade retention are somewhat different from one track to the next. While relatively few students fail in Boston's selective schools, those who do are often afforded a "second chance" in a district high school. In contrast, non-promotion in the district high schools, the schools-of-last-resort, acts as the ultimate sorting mechanism, separating those who will stay in school from those who will leave school altogether.

TABLE 8
Boston Non-Promotion Rates by School for 9th Grade and Schoolwide (June 1988)

	9TH GRADE	SCHOOLWIDE
Boston Latin Academy	4.9	3.2
Boston Latin School	4.2	3.4
Boston Technical High	15.1	10.1
Brighton	39.7	25.0
Charlestown	20.9	19.2
Dorchester	25.6	15.8
East Boston	29.9	14.1
English	24.4	14.8
Hyde Park	33.9	20.9
Jamaica Plain	31.0	21.6
Jeremiah Burke	45.0	31.0
South Boston	22.9	15.7
Boston High	36.3	27.5
Snowden (Copley)	42.1	28.5
Madison Park	34.3	25.5
Umana	13.7	10.5
West Roxbury	0.0	6.8
All High Schools	24.5	17.0

School Membership and Belonging: Attendance and Dropout Patterns

Attendance and dropout data further illustrate the vast differences between the two tiers of Boston's high school system, and suggest that, in general, the more selective high schools have much greater "holding power" than the magnet schools and districtwide high schools.⁵⁵ For example, of the 2,255 students who dropped out of all Boston high schools in 1987-88, only 41, representing 1.8% of all students who dropped out, left Boston's exam schools. At the same time, of the 2,832 students who graduated from all 17 high schools, 691, representing 24% of all graduates, were from the three exam schools.

By comparison, data reveal that for non-selective high schools, with the exception of the citywide Snowden magnet school, students not only officially drop out in high numbers, but up to 40% may be absent from school more than 15% of their days enrolled. These students, although not counted as "dropouts," are likely to be on the road to dropping out. Together, the "days absent" and dropout data provide graphic indication of the holding power of each school.

Table 9 presents "days absent" and dropout data by high school for the school year 1987-88.

TABLE 9
"Days Absent" and Dropout Rates by High School

	1987-88	1987-88	1983
	Absent More than 15% of Student Year	Annual Dropout	Grade 9 Cohort Dropout*
Boston Latin Academy	15.7	1.4	5.3
Boston Latin School	4.5	0.1	0.8
Boston Technical High	24.3	2.6	13.9
Brighton	32.4	23.6	45.2
Charlestown	35.7	11.0	34.8
Dorchester	29.3	25.0	53.7
East Boston	28.2	15.8	40.2
English	30.1	14.0	43.3
Hyde Park	34.0	9.6	38.7
Jamaica Plain	29.1	25.6	46.9
Jeremiah Burke	36.5	15.1	51.5
South Boston	39.0	19.9	54.4
Boston High	25.0	18.6	66.7
Snowden (Copley)	17.4	5.4	22.6
Madison Park	41.1	14.7	44.6
Umana	35.6	12.9	24.4
West Roxbury	39.2	10.6	29.0
High Schools Citywide	Not Available	13.4	39.6

* Cohort rates for each school are calculated to include only students who dropped out of the same school in which they enrolled in ninth grade, excluding students who transferred to another school.

These data reveal that in some Boston high schools, the numbers of students leaving school permanently combined with the numbers of students chronically absent are so great as to have reached crisis proportions. But as we have seen, absentee and dropout rates vary dramatically from school to school. Indeed, Boston's overall dropout rate of 40% masks large disparities among the rates of individual schools — rates ranging from a low of less than 1.0 at Boston Latin School to 66.7 at Boston High. These disparities suggest tremendous differences in the climate for learning among Boston's high schools, which are likewise reflected in the differential access to knowledge the schools provide.

Differential Access to Knowledge: Allocation of Curriculum and Instructional Resources

In Boston, students' access to knowledge varies dramatically according to the school they attend. Despite a standardized curriculum, course offerings vary considerably, particularly between selective high schools and district high schools.³⁴ Within schools, access is further differentiated according to students' course placements.

Table 10 describes some of these differences offered in 1988–89 in two areas considered crucial for future educational and vocational advancement: foreign language and mathematics offerings.

Clearly, the limitations of course offerings themselves circumscribe what students may learn in a given school. In the study of foreign languages, for example, learning in the district high schools must often stop after a second or, at best, a third year. Indeed, some non-examination schools in Boston offer a longer sequence of courses in keyboarding than in foreign languages, and only Snowden offers a full secondary foreign language curriculum.

The array of mathematics courses offered in each school provides a similar picture. Overall, it is clear that "basic," "general," and non-academic courses — courses with content well below that considered standard ninth-grade fare — are concentrated in non-examination schools, and only five of these schools offer any "College" or "Honors" sections of mathematics courses. In contrast, all three examination schools offer "College" and "Honors" sections through trigonometry.

For some school officials and observers, the explanation for such disparities lies in the characteristics of students attending the school. Staff may explain that their schools have "too few" students adequately prepared for a certain course to justify offering it. But schools can come up with creative solutions to this dilemma. Last year, for example, Umana School enrolled one student in a calculus course at Bunker Hill Community College, and Dorchester High sent one student to the University of Massachusetts for Advanced Placement Math.

"Basic," "general," and non-academic courses — courses with content well below that considered standard ninth-grade fare — are concentrated in non-examination schools, and only five of these schools offer any "College" or "Honors" sections of mathematics courses. In contrast, all three examination schools offer "College" and "Honors" sections.

TABLE 10
Foreign Language and Mathematics Course Offerings in Boston High Schools (1988-89)

	BOSTON LATIN ACADEMY	BOSTON LATIN SCHOOL	BOSTON TECHNICAL HIGH	BRIGHTON	CHARLESTOWN	DORCHESTER	EAST BOSTON	ENGLISH
FOREIGN LANGUAGES	Spanish 1-3 Spanish Honors 2,3 Spanish Literature AP French 1-3 French Honors 2, 3 French Literature AP German 1-4 Latin 1-5 Latin Honors 2-5 Latin AP Greek 1	Spanish 1-5 Spanish Honors 2-4 Spanish Literature AP Spanish Language AP French 1-4 French Honors 2, 3 French Literature AP French Language AP German 1-4 German Honors 3, 4 Italian 1-4 Chinese 1-3 Greek 1-4 Latin 1-5 Latin 3 Honors Latin AP	Spanish 1-3 French 1-3	Spanish 1-3 French 1-3	Spanish 1, 2	Spanish 1,2 French 1, 2	Spanish 1, 2 Italian 1-3	Spanish 1-3 French 1, 2
MATHEMATICS	Algebra 1 (College and Honors) Geometry (College and Honors) Algebra 2 (College and Honors) Trigonometry (College and Honors) Calculus Math AP Math Topics	Algebra 1 (College and Honors) Geometry (College and Honors) Algebra 2 (College and Honors) Algebra 2/ Trigonometry (College) Advanced Math (including Honors sections) Calculus (Honors) Elementary Analysis Math AP	Algebra 1 Geometry (including Honors sections) Algebra 2 (including Honors sections) Trigonometry (including Honors section) Advanced Math Calculus Math Review	Basic Math 2 General Math Algebra 1 Geometry (including College section) Algebra 2 (College) Trigonometry (College) Advanced Math Math CEEB Consumer Math Math Topics	Basic Math 1 Basic Math 2 General Math Algebra 1 Geometry Algebra 2/ Trigonometry Advanced Math Elementary Analysis Math CEEB Consumer Math	Basic Math 2 Algebra 1 Geometry Algebra 2 Trigonometry Math AP Basic Skills Math Functional Math Math Topics Math Review Math Lab	Basic Math 1 Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Trigonometry Math CEEB Basic Skills Math Functional Math	Basic Math 1 Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Trigonometry Functional Math Consumer Math Career Math Technical Math

Moreover, such rationalizations merely obscure the reality that schools make choices regarding their differential allocation of staff and resources based upon judgments about their students' capacity for learning. For example, in 1988-89, Jamaica Plain High's math department consisted of only three math teachers for approximately 650 students, while Brighton High had six math teachers for roughly the same number of students and similar proportions of special

HYDE PARK	JAMAICA PLAIN	JEREMIAH BURKE	SOUTH BOSTON	BOSTON HIGH	SNOWDEN (COPLEY)	MADISON PARK	UMANA	WEST ROXBURY
Spanish 1 French 2	Spanish 1-3 French 1,2	Spanish 1, 2 French 1, 2	Spanish 1, 2	Spanish 1	Spanish 1-4 French 1-4 Chinese 1-4 Japanese 1	Spanish 1-3 French 1, 2	Spanish 1-3	Spanish 1-3
Basic Math 1 Basic Math 2 General Math Algebra 1 Geometry (College) Algebra 2 (College) Trigonometry (College) Functional Math	Basic Math 2 General Math Algebra 1 Geometry Geometry (Honors) Algebra 2 (including one Honors section) Advanced Math	Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Trigonometry Math Topics Math Review	Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Advanced Math Basic Skills Math Functional Math Consumer Math Math Review	Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Math AP Math Review Math Lab	Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Trigonometry Advanced Math Basic Skills Math Math Review Math Lab	Basic Math 1 Basic Math 2 General Math Algebra 1 Geometry Algebra 2 Advanced Math Consumer Math Math Review	Basic Math 1 General Math Algebra 1 (including College section) Geometry Algebra 2 Trigonometry Calculus Math CEEB Consumer Math	Basic Math 2 General Math Algebra 1 (including Honors) Geometry (including College and Honors) Algebra 2 (including Honors and College) Trigonometry (including Honors) Advanced Math Math CEEB Basic Skills Math Functional Math Career Math Technical Math Math Topics Math Review

education and bilingual students. That year, South Boston High, with approximately 850 students, had five math teachers, three teachers for home economics, and two for social studies, while Charlestown High had five physical education teachers but only three science teachers. These variations in staff allocation must inevitably translate into differences in access to knowledge, even among schools in the same tier.

Assumptions of Student "Readiness"

Schools often argue that their staff distribution accurately reflects the needs of their students, and schools with few or no upper level or honors courses may claim that their students are simply "not ready" for them. But in our view, the decision of some high schools to offer relatively few higher level academic courses reflects the narrow definition of "readiness" which pervades the entire Boston school system.

In a 1987 report on the implementation of Boston's new standardized curriculum, the Citywide Education Coalition (CWECC) found widespread dissatisfaction among ninth grade teachers, not with the curriculum content, but with the "unreadiness" of the students who came into their classrooms. Teachers' complaints revealed their assumptions that a hierarchy of skills must drive instruction and that mastery of so-called "basic" skills must precede access to other learning. Indeed, the study found that "most teachers see their role as one of teaching the basics" and that "many teachers think that even the objectives for the most fundamental courses — Basic and General — are too demanding."

For example, one English teacher defined his goals as teaching students to:

Write a complete sentence, a solid paragraph, a coherent composition. Students have to identify the main idea, character, plot, and then write first a sentence, then a paragraph, about each. We work up from the simple sentence to the paragraph.⁵⁵

Likewise, a ninth grade math teacher asserted:

The goals for my Basic Math students are that by the end of the year they can do the four math operations with fractions, decimals, and word problems. I feel comfortable if a kid can do the four operations in the three systems.⁵⁶

Further, the study found that many teachers rely extensively on the use of worksheets to accomplish these "basic" goals, so much so that many would like to see them prepared by the central office of the school system.⁵⁷

Not surprisingly, the CWECC report concluded that in Boston's district high schools, remediation is the norm. Yet the report did not question the implication that students' poor performance demanded more drill in "the basics." In fact, it left unchallenged the "common sense" assumptions that certain "basic" skills must precede other more "advanced" skills, that particular skills can be separated from knowledge, and that the grappling with ideas and concepts depends upon the perfection of basic skills.

But, as we see clearly in Boston high schools, when this model is rigidly applied, students who do not master the basic skills in the early grades are often condemned to a state of permanent remediation. Deemed as "at risk" and defined primarily in terms of their deficits, these students may be systematically denied access to valued knowledge. As the Council for Basic Education (CBE) has pointed out, in schools with a "basics first" orientation:

Knowledge — the information that both makes school interesting and equips students to be productive citizens — is like a prize at the end of a hurdle race. Few reach the prize and many fall over the hurdles.⁵⁸

Moreover, according to the Council, research on learning has not supported the notion that specific skills must be acquired before students are capable of absorbing knowledge. To the contrary, it may be exposure to ideas and concepts that provides the context within which students can make sense of basic skills and acquire them as needed rather than in precise sequence. The Council notes that teaching skills isolated from concepts makes school a meaningless exercise for those children who most need to experience stimulating and meaningful applications of knowledge in context. Ironically it is these students who generally receive the most dull and repetitive drill-and-practice instruction in isolated "basic" skills.⁵⁹

Ninth Grade Course Enrollment: Assigning Students to Permanent Remediation?

The "readiness" and "basics first" orientation that pervades Boston schools inevitably plays a role in school-based decisions regarding ninth grade course enrollment. Students' instructional starting point, determined by ninth grade placement, has critical impact on how far students ultimately will be able to go in their education, and, likewise, on the future life chances of these students. In fact, in terms of access to knowledge, what may be more important than the end point of schooling as defined by courses taken is the point at which students begin their high school education. These instructional starting points are determined in each school.

The course placement of students in the ninth grade is an indication of schools' willingness to encourage students to take academic courses, their belief that all students deserve access to knowledge, and their commitment to adopting practices that will help all students succeed. As John Chubb of the Brookings Institute has emphasized, "An average student in an effective school is twice as likely to be tracked into an academic program as an average student in an ineffective school....Tracking decisions are not simply a function of student ability; they are in large measure determined by school policy."⁶⁰

In Boston's district high schools, remediation is the norm. Yet, teaching skills isolated from concepts makes school a meaningless exercise for those children who most need to experience stimulating and meaningful applications of knowledge in context. Ironically it is these students who generally receive the most dull and repetitive drill-and-practice instruction in isolated "basic" skills.

TABLE 11
Student Placement Rates in Math Courses in Boston Examination and Non-Exam High Schools (1988-89)

	GRADE 9		GRADE 10		GRADE 11		GRADE 12	
	Exam School	Non-Exam	Exam School	Non-Exam	Exam School	Non-Exam	Exam School	Non-Exam
Grade Level or Above*	95.5	26.2	93.3	24.3	87.0	19.7	89.2	16.8
Academic Course Below Grade Level**	4.5	0.0	6.7	24.2	12.9	38.1	10.8	46.2
General Math	0.0	24.1	0.0	26.7	0.0	12.0	0.0	9.9
Basic Math 1 and 2	0.0	37.3	0.0	13.6	0.0	9.2	0.0	6.6
Low Status Courses "Elective" and Special Education Basic Skills Math, Functional Math, Consumer Math, Career Math, Technical Math, Math Topics, Math Review, Math Lab)	0.0	12.4	0.0	10.8	0.1	12.6	0.0	17.3
Math College Entrance Examination Board (CEE) Preparation	0.0	0.0	0.0	0.4	0.0	8.6	0.0	3.1

* "Grade Level" at the high school level translates into Algebra 1 in Grade 9, Geometry in Grade 10, Algebra 2 in Grade 11, and Trigonometry or Trigonometry/Elementary Analysis in Grade 12. Currently only students at Boston Latin School and Boston Latin Academy begin Algebra 1 in eighth grade, allowing them access to calculus by Grade 12. In 1988-89, 285 twelfth graders in Boston exam schools and 51 twelfth graders in all other schools, 12.8% of all twelfth graders, were enrolled in calculus or Advanced Placement math. In non-exam schools, only an additional 289 students were enrolled in trigonometry or advanced math courses.

** Students may be enrolled in academic courses below grade level because they are repeating a course, first enrolled in Algebra 1 after ninth grade, or have elected to delay taking the math courses required for graduation. All Grade 10 students, half of Grade 11 students, and one quarter of Grade 12 students in this category in non-exam schools are enrolled in Algebra 1.

Table 11 describes differences between examination schools and non-examination schools with respect to placement of ninth graders in grade level, academic, general, basic, and "other" math courses.⁶¹

As the data suggest, while the overwhelming majority of exam school ninth graders are enrolled in grade level courses, only slightly more than one-quarter of ninth graders in non-examination schools are so enrolled. Significantly, this rate of enrollment on grade level in Grade 9 in non-examination schools represents a dramatic drop from that rate in Grade 8. Indeed, in both Grades 9 and 10 in non-exam schools, more students are enrolled in Basic Math or other low-status courses than in grade level courses.

Not until the eleventh grade are more students enrolled on grade level or in below-grade level academic courses, and this shift may occur in part because 60% of all students who drop out of Boston high schools have done so by the eleventh grade.⁶² Moreover, by twelfth grade, approximately one-third of the students in Boston's non-examination schools still remain in "Basic," "General," or "Other" courses. These students are likely to represent many of those twelfth graders whose standardized test scores fall below ninth grade levels, a situation that may reflect less how hard they have worked than the simple fact that they have never been placed in a high school-level math course.⁶³

While the overwhelming majority of exam school ninth graders are enrolled in grade level courses, only slightly more than one-quarter of ninth graders in non-examination schools are so enrolled. Indeed, in both Grades 9 and 10 in non-exam schools, more students are enrolled in Basic Math or other low-status courses than in grade level courses.

TABLE 12
Ninth Grade Placement Rates by School and by Math Level
in Boston Non-Exam Schools (1988-89)

	GRADE LEVEL	GENERAL	BASIC	ALL OTHERS
Brighton	25.7	13.2	60.7	0.4
Charlestown	29.9	13.0	56.7	0.4
Dorchester	17.0	18.7	31.9	32.4
East Boston	29.0	0.0	68.9	2.2
English	18.6	25.9	45.9	9.6
Hyde Park	20.0	22.8	37.8	19.4
Jamaica Plain	25.5	42.2	28.9	3.4
Jeremiah Burke	32.6	29.3	38.1	0.0
South Boston	24.3	37.5	13.2	25.0
Boston High	3.2	35.1	42.3	19.4
Snowden (Copley)	51.1	0.6	24.1	24.1
Madison Park	31.8	33.3	33.3	1.5
Umana	40.9	25.3	33.8	0.0
West Roxbury	38.3	5.4	39.6	16.8
All Ninth Graders in Non-Exam Schools	26.2	24.1	37.3	12.4

Instructional Starting Points: Moving Backwards on the Road to Knowledge

Compared to course enrollment data for eighth grade, data on ninth grade placements suggest that Boston students may be moving backwards, away from rather than closer to knowledge that can open doors for them. In fact, a number of our interviewees described such backwards motion and suggested that schools often underestimate the capabilities of their students. For example, a parent whose son is enrolled in a district high school asked:

How long are they going to teach Alex long division and multiplication? He was factoring equations last year in eighth grade, but they've put him in Basic this year. He's ready for Algebra 1. Just because he needs help in reading comprehension doesn't mean he can't go on in math.

Likewise, Brendan, a ninth grader placed in Basic Math in another high school reported, "I came from Catholic school, and I did the same stuff two years ago. It's much too easy for me." Not surprisingly, Brendan complained math was his most boring subject. Yet, for lack of anyone to encourage or challenge him, he had not tried to transfer into a higher course. In this way, low-level course placements may institutionalize low expectations on the part of students themselves as well as the school staff.

Table 12 describes ninth grade students' chances of placement at each level for each non-examination high school in Boston.

Do all Boston high schools offer equal access to knowledge? Based on differences in curricular offerings and schools' instructional starting points, it appears they do not. This starting point has critical impact on how far a student can go academically and, therefore, on the future opportunities that will be open to each student.

Policies to Expand Access to Knowledge: Appearance or Reality?

Teachers in urban school systems throughout the country, of course, face frustrations similar to those of Boston teachers in their encounters with students whose basic skills are not deemed adequate. However, not all schools respond by stepping up remediation and basic skills drills. Instead, some are attempting to raise student achievement by eliminating low-level courses. For example, the Oakland and San Diego school districts are currently phasing out remedial courses, their equivalent to Boston's "Basic" courses, in high schools and middle schools; and in September, 1989 the Denver Board of Education approved a plan to do likewise. In addition, the Council for Basic Education reports that Balboa High School in San Francisco has replaced remedial courses with a core curriculum in Grades 9 and 10, and Garfield High School in Los Angeles has intentionally recruited into Advanced Placement courses low-income Hispanic students formerly underrepresented in such courses.⁶⁴

These efforts do more than merely *place* students in grade-level courses and above. At the same time, these schools offer special tutoring and counseling, sometimes supported through the use of individual contracts encouraging students to maintain specified grades. Such approaches emphasize the commitment of these schools to take extra concrete steps to match their higher expectations for students. They also suggest the potential for schools to adopt real alternatives to the course of "permanent remediation" currently followed in districts such as Boston.

In contrast, policymakers in Boston have made no attempt to change students' instructional starting points in high school. Rather, they have attempted to equalize access to knowledge by imposing the requirement that all graduates, starting with the class of 1992, complete four years of mathematics including Algebra 1. While this requirement appears to resolve some disparities in access to mathematical learning, it may actually have the consequence of depressing rather than promoting achievement.

Ironically, the new "standard" ensures only that students, if they do not drop out first, may satisfy the "Algebra 1 before graduation" requirement, while still experiencing a basically remedial mathematics program. Indeed, this requirement sanctions the placement of students in Basic Math 1 in Grade 9, Basic Math 2 in Grade 10, General Math in Grade 11, and Algebra 1 in Grade 12. In practice, then, this "reform" is more cosmetic than real and does not fundamentally challenge schools' low expectations of their students.

Ironically, the new "standard" ensures only that students, if they do not drop out first, may satisfy the "Algebra 1 before graduation" requirement, while still experiencing a basically remedial mathematics program. This "reform," then, is more cosmetic than real and does not fundamentally challenge schools' low expectations of their students.

The adoption of the Algebra 1 requirement suggests that Boston has failed to learn from the experiences of other urban districts where such measures have fallen far short of their objectives. In these districts, teachers often chose either to teach "low-ability" students algebra in the traditional way, flunking many students in the process, or to teach them courses labeled "algebra" that actually emphasizes remedial arithmetic.⁶⁵

In Massachusetts, a study sponsored by the state Department of Education found pronounced variations in content in courses with the same course titles, including Algebra 1.⁶⁶ For example, the lowest level of Algebra 1 (a two-year course which covers the material of Algebra 1 at half the normal pace, known in Boston as "Stretch Algebra") differed from "regular" Algebra 1 courses in ways described as "surprising." In particular, the study noted:

Students are not expected to synthesize their knowledge, apply what they know to problem situations, or respond to test questions based on their cumulative, rather than their most recent knowledge. In general, the course may be described as teaching students how to do algebra, but not to understand algebra.⁶⁷

Such findings suggest that Boston's own Algebra 1 requirement will not necessarily result in raising standards of mathematical knowledge or contribute to real improvement in student learning.

Differential Access to Knowledge By Race

While ninth grade placement rates vary considerably by school, data also indicate that course placement, and the access to knowledge it represents, also varies by race. In non-examination schools, these differences are most dramatic. Specifically:

- Both African-American and Hispanic ninth grade students are less likely than ninth graders overall to be enrolled on grade level and more likely to be enrolled in basic level courses.
- Both African-American and Hispanic ninth graders are more than twice as likely as ninth graders overall to be enrolled in basic level or other low-status math courses than on grade level.
- White students are more likely than students overall to be enrolled on grade level and less likely to be enrolled in basic or general courses.
- Asian students are most likely to be enrolled on grade level or above and least likely to be enrolled in basic or general levels; nearly three-fifths of Asian ninth graders in non-exam schools are enrolled in grade level courses.

Tables 13A, 13B, and 13C describe these patterns by race and by school.

TABLE 13A
Ninth Grade Placement Rates in Math Courses in Boston Non-Exam Schools (1988-89)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
Grade Level or Above	22.1	33.6	21.7	58.5	26.2
General	24.1	20.0	28.8	17.6	24.1
Basic	38.5	35.2	40.9	21.0	37.3
All Others	15.3	11.1	8.6	2.9	12.4

TABLE 13B
Ninth Grade Placement Rates in Basic Math 1 or Basic Math 2 in Boston Non-Exam Schools (1988-89)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
Brighton	82.1	64.5	62.7	29.7	60.7
Charlestown	66.2	74.4	60.3	24.5	56.7
Dorchester	29.3	*	38.6	*	31.9
East Boston	75.6	66.9	*	*	68.9
English	50.0	15.2	45.0	*	45.9
Hyde Park	37.5	32.0	*	*	37.8
Jamaica Plain	37.1	52.9	17.4	*	28.9
Jeremiah Burke	38.7	*	50.0	*	38.1
South Boston	19.0	9.9	8.1	5.6	13.2
Boston High	34.5	34.2	65.6	*	42.3
Snowden (Copley)	23.5	36.0	25.8	*	24.1
Madison Park	32.6	19.0	41.3	*	33.3
Umana	37.8	33.3	*	*	33.8
West Roxbury	48.6	24.4	30.4	*	39.6
All Ninth Graders in Non-Exam Schools	38.5	35.2	40.9	21.0	37.3

TABLE 13C
Ninth Grade Placement Rates on Grade Level or Higher in Boston Non-Exam Schools (1988-89)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
Brighton	11.5	29.0	24.1	43.8	25.7
Charlestown	18.3	23.3	11.1	73.6	29.9
Dorchester	21.6	*	5.3	*	17.0
East Boston	17.1	32.3	*	*	29.0
English	12.7	60.6	17.5	*	18.6
Hyde Park	20.8	12.0	*	*	20.0
Jamaica Plain	21.3	29.4	28.9	*	25.5
Jeremiah Burke	30.7	*	20.0	*	32.6
South Boston	18.1	28.8	27.0	33.3	24.3
Boston High	2.7	2.6	3.1	*	3.2
Snowden (Copley)	46.1	60.0	51.6	*	51.1
Madison Park	33.2	52.4	20.0	*	31.8
Umana	35.4	38.5	*	*	40.9
West Roxbury	27.9	48.8	69.6	*	38.3
All Ninth Graders in Non-Exam Schools	22.1	33.6	21.7	58.5	26.2

* Total number enrolled is fewer than 15.

In some schools, different placement rates can result in the virtual resegregation of schools by course enrollment. Within specific courses and at specific district high schools, African-American and Hispanic students are most likely to remain in the remedial tracks. For example, in 1988–89:

- At Dorchester High (where 20% of the students are Hispanic), 24 out of 25 students (96%) enrolled in Functional Math were Hispanic, and all 23 students enrolled in Math Review were Hispanic.
- At English High (where 64% of the students are African-American and 20% are Hispanic), 52 out of 61 students (85%) enrolled in Functional Math were African-American, including all 39 ninth graders in that course; 18 out of 20 students (90%) enrolled in Consumer Math were African-American or Hispanic; and 118 out of 126 students (94%) enrolled in Basic Math 1 were African-American or Hispanic.
- At Jeremiah Burke High (where 80% of the students are African-American), the Math Topics course, an "elective" for students who have failed math one or more years, was comprised entirely of African-American students.
- At West Roxbury High (where 58% of the students are African-American), 16 out of 20 students (80%) enrolled in Basic Skills Math were African-American.

On the other end of the spectrum, African-American and Hispanic students are more likely to be underrepresented — or unrepresented completely — in upper-level courses and college preparatory or honors sections of high status courses at some high schools. For example, in 1988–89:

- At Charlestown High (where 33% of the student body is African-American and 26% is Hispanic), of 44 students enrolled in Algebra 1/Trigonometry only 4 (9%) were African-American and none were Hispanic; only 4 of the 30 students (13%) enrolled in Math CEEB (to prepare for College Board examinations) were African-American or Hispanic; and none of the nine Advanced Math or 27 Elementary Analysis students was African-American or Hispanic.
- At Dorchester High School (where 20% of the student body is Hispanic), only 22 out of 147 students (15%) enrolled in Algebra 1 and only 6 out of 55 (11%) enrolled in Geometry were Hispanic.
- At West Roxbury High (where 58% of the student body is African-American and 7% is Hispanic), 3 out of 15 students (20%) in Honors Geometry were African-American and none was Hispanic; and only 9 of the 23 students (39%) enrolled in Honors Algebra 2 were African-American or Hispanic.
- At Brighton High (where 53% of the student body is African-American or Hispanic), 8 out of 26 students (31%) enrolled in college prep Geometry were African-American or Hispanic; 9 out of 45 students (20%) enrolled in college prep Trigonometry were African-American or Hispanic; and of the 12 students enrolled in Advanced Math, only one was African-American and none was Hispanic.
- At East Boston High (where 18% of the student body is African-American and 6% are Hispanic), only 5 of 42 students (12%) enrolled in Math CEEB were African-American or Hispanic.

ABILITY GROUPING AND THE POTENTIAL FOR RESEGREGATION

**MAINTAINING HOPE
AGAINST THE ODDS**

Gloria was in the "advanced" clusters in middle school and had never failed a grade in Boston Public schools. As an above-average student, she had hoped to go on to Boston Latin School, but when she took the S.S.A.T. for admission, as she explained, "I flunked the test. I wasn't feeling good that day....I felt bad about that. I wanted to go to that school. It's better than the others. They say it has better opportunities." Discouraged after her first try in sixth grade, Gloria passed up the chance to re-take the exam in eighth grade.

Forced to choose another high school after eighth grade, Gloria received no advice or direction from staff at her middle school. She ultimately enrolled at Boston High, a "work-study" school in which students attend academic classes in the morning and work in the afternoon. Gloria knew little about the school's academic program when she made her decision; the promise of extra income to help her family and the fact that her father could drop her off at the school on his way to work were the most important factors in her choice of school.

Gloria's ninth grade schedule included four required core courses emphasizing basic skills — English, Basic Math, Civics, and Earth Science. For her one elective course, she was given a choice among Reading, Spanish 1, or Keyboarding. Her achievement levels indicated she did not need further reading instruction, but because her home language was Spanish, she was not allowed to enroll in Spanish 1, the only elective intended for college-bound students; so she enrolled in Keyboarding 1. Given a similar tenth-grade schedule of required courses and possible electives, Gloria took a second year of Keyboarding for lack of an alternative. She says, "I would like to learn French, but my school doesn't offer it."

Now in the eleventh grade, Gloria still hopes to go on to higher education; her mother works at a local college that will waive tuition for any of her children accepted. But after two years in high school, Gloria is coming to realize that her courses may not have prepared her for college, and, although she enjoys school, she is somewhat disillusioned with her present educational experience. "We have only four courses every day," she explains. "We should get more classes so we can learn more, but it is a work-study program."

In addition to her work requirements, Gloria's current schedule includes English, U.S. history, biology, and a course called "S.A.T.," in which the teacher reviews "lots of hard words he says we'll need in college." Since Gloria has never seen a guidance counselor, she can only guess that the courses she is now taking will prepare her adequately for college. Yet by virtue of the school she attends and her course placements in ninth and tenth grade, Gloria's application for college will show no foreign language study, no math beyond Algebra 1 (which she will take senior year), and a limited science background. Gloria's future, in short, rests less on her own potential or motivation, than on the accident of her "choice" of school and the limited access to knowledge offered there.

Placement in school courses should not depend on either race or income level. Rafael Valdivieso of the Hispanic Policy Development Project reports that in Catholic schools enrolling large numbers of low-income students, Hispanic students are as likely as white students to be enrolled in academic programs, resulting in much narrower differences in achievement between the two groups than in high schools nationally. Noting that school-based decisions about school organization are likely to have greater impact on vulnerable groups than special programs, Valdivieso underscores the obvious: students enrolled in academic courses regardless of race or class will show higher levels of academic learning.⁶⁸

In our view, course enrollment disparities by race illustrate a pattern in Boston that should alarm citizens who believe in the promise of equal educational opportunity. As several researchers have noted:

For many students, being placed into tracks also means being limited to courses that are much less demanding and significantly less rich in content than they have a right to expect....The expectation of minimal learning is especially shameful when it is based on the presumption that many students lack the capacity to develop these skills, and that the largest proportion of those presumed to lack those capacities are nonwhite and lower-class.⁶⁹

The overrepresentation of African-American and Hispanic students in lower-than-grade-level placements and their underrepresentation in high-status courses suggest that placement decisions may reflect what Boston's Black Agenda Steering Committee has decried as simply "presumptions regarding the intellectual or cultural deficits of Black children."⁷⁰ Such patterns suggest that many schools have institutionalized such presumptions in their placement practices.

Placement Decision-Making and Student Disempowerment

Clearly, all students are not alike in their capacity to benefit from access to valued knowledge. But the differential allocation of the educational opportunities to acquire knowledge — reflected in the range of courses offered in a school and in ninth grade course placement — prejudices students' potential for learning. Moreover, placement decisions for entering high school students often rest on very little information, particularly in district high schools. For example, since non-examination schools may not have a full list of students assigned to their school until the summer or even the first week of school, registrars, guidance counselors, or department chairpeople typically responsible for scheduling may have little time to individualize placements, consult with students, or even review student records.

However, placement patterns suggest that, in the absence of information, schools choose to err on the side of low expectations. Low expectations underlie the placement of individual students in particular courses as well as choices schools make about which courses to offer. At the same time, the Central Office appears to make little effort to provide schools with critical information and technical assistance that could result in better match between students and the school's program.

The concern about student placement is a concern about empowerment and choice. Not all students need to attend four-year colleges. Some may want to pursue other forms of higher education, apprentice in a trade, or seek postsecondary employment. But schools have the responsibility to teach the knowledge and thinking skills that will empower students and maximize their choices for future academic and life opportunities.

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The Differential Allocation of Rewards

Recent research from the National Center on Effective Secondary Schools (NCESS) on high schools that "work" for their students suggests that successful schools promote both students' "membership" and "engagement" in their schools.⁷¹ "Membership," according to Gary Wehlage and his co-researchers, refers to students' emotional ties to others — both adults and peers — in their school and their commitment to its mission and purpose. "Engagement" reflects students' psychological investment in their schoolwork and other activities, including participation in extracurricular and academic activities in their school.

According to the NCESS study, membership and engagement must be sustained by a set of meaningful rewards having both extrinsic and intrinsic value. College admission and prospects for an improved future or social status are examples of extrinsic rewards. Opportunities to acquire new knowledge and skills and possibilities for working with others in a common endeavor may represent intrinsic rewards.

While students in selective and magnet high schools can anticipate the likelihood of advancing on to higher education, students outside of these schools have extremely low chances of such reward. Of the 2,832 Boston students graduating in June, 1988, 1,090 went on to four-year colleges; 550 of these students (50%) were from Boston's three examination schools, with 41% from the two Latin Schools — Boston Latin and Latin Academy — alone.

While all students require such rewards, such benefits are allocated differentially in Boston, both among and within different high schools in the district. For example, while students in selective and magnet high schools can anticipate the likelihood of advancing on to higher education, students outside of these schools have extremely low chances of such reward. Specifically, of the 2,832 Boston students graduating in June, 1988, 1,090 went on to four-year colleges; 550 of these students (50%) were from Boston's three examination schools, with 41% from the two Latin Schools — Boston Latin and Latin Academy — alone.

Table 14 describes the likelihood of college admission for Boston's Class of 1988 by high school.

Just as acceptance into one of Boston's selective high schools may act as an extrinsic reward to sustain the engagement of younger students, the chances of college admission serves a similar function for exam school students. As Clifford, who transferred out of Boston Latin School after ninth grade, reported:

Most of the kids from Boston Latin will go to college. It's sort of expected. Boston Latin really prepares you for college — it makes you self-motivated, gives you deadlines, expects a lot from you. I think if I graduated from Boston Latin, I'd have an easier time getting into a good college.

Students enrolled in selective high schools concurred. "That's why I'm here," declared David. "You have to go to college to get a good job." Zaida agreed: "I want to have a career. Of course I want to go [to college]. I'd like to go to Yale, but I don't know if I'll get in. I want to study law or maybe go into business administration." And a third Latin School student asserted:

It takes more than a high school diploma to get a job....I thought maybe I'd like to go to Harvard, but now I think probably M.I.T. I want to go into some field using computers because that's where the jobs are going to be.

Of course, many students in non-selective or non-magnet schools, also hope to go to college. And some students who remain to graduate from Boston's district high schools do indeed attend four-year colleges.⁷² However, the experiences of Boston's students who do enroll in college suggest further disparities in the level of preparedness of college-bound students graduating from exam schools and those from non-examination schools — disparities which may affect students' persistence and success in higher education. For example, for Boston's class of 1983, 27.9% of exam school students had graduated from their original college by the middle of their fifth year, compared to 5.8% of students from the non-exam high schools. And for the Class of 1987, while 92.6% of exam school graduates have enrolled in their second semester of college, only 72.6% of non-exam school graduates have reached this point, a difference that is wider than for any group studied since 1983.⁷³

TABLE 14
Higher Education Enrollment by School for Graduating Class of 1988

	# GRADUATES	% AT 4-YR COLLEGE	% AT 2-YR COLLEGE	% AT 1-YR COLLEGE
Boston Latin Academy	172	80.0	6.0	2.0
Boston Latin School	326	95.0	1.0	0.5
Boston Technical High	193	53.0	7.0	3.0
Brighton	123	33.0	18.0	1.0
Charlestown	176	22.0	24.0	3.5
Dorchester	134	18.0	12.0	8.4
East Boston	161	22.0	10.5	9.0
English	291	28.0	19.0	3.0
Hyde Park	155	19.0	16.0	1.0
Jamaica Plain	116	28.0	23.0	1.0
Jeremiah Burke	113	23.0	14.0	7.0
South Boston	139	22.6	11.0	1.0
Boston High	122	12.0	12.0	2.0
Snowden (Copley)	94	49.0	11.0	4.0
Madison Park	184	19.0	22.0	5.0
Umana	93	42.0	16.0	6.0
West Roxbury	213	16.7	10.0	8.0

* Another 27 students graduated from the special education schools, the McKinley (25) and the Horace Mann (2). Data for their enrollment in higher education was not available.

The dynamic of rejection and withdrawal on the part of many Boston students may be accelerated by a tracked high school system which by selecting some students for "success" dooms others to "failure." Well-intentioned efforts to "meet students' needs" may deprive students of what they *really* need — opportunities for academic, social, and personal growth and development — opportunities which are unequally distributed in Boston's high schools.

As many students know, the better opportunities accrue to students enrolled in the selective schools, and this knowledge can serve to undermine the commitment to learning and lower the aspirations of students not enrolled in these "top-track" schools. Indeed, a teacher at one of Boston's district high schools described the consequences, both educational and psychological, for students not chosen for exam schools:

Kids find it tremendously depressing not to be picked for the school of their choice, so they enter high school with the feeling of being 'second-hand goods.' Not only do they enter a school they feel is second best, but it may not have what they were choosing — the kinds of courses, atmosphere, people they wanted to be with, or the resources and options they wanted to choose. The kids feel cheated, found not to be worthy or special. It certainly can cripple their interest in high school, and some give up.⁷⁴

We believe this dynamic of rejection and withdrawal on the part of many Boston students may be accelerated by a tracked high school system which by selecting some students for "success" dooms others to "failure." The reform of such a system requires Boston schools to acknowledge that some well-intentioned efforts to "meet students' needs" may deprive students of what they *really* need — opportunities for academic, social, and personal growth and development — opportunities which are unequally distributed in Boston's high schools.

De-Tracking and the Restructuring of Boston Schools

If Boston schools are to fulfill the promises and rhetoric of restructuring, they must begin to focus attention on reforming school practices that fail students. One major practice that cries out for reform is tracking, along with the sorting and placement mechanisms that support it.

As a recent report from the Council for Basic Education has stated:

To bring an end to tracking would not herald paradise in our schools. It would not ensure that all students become eligible to enter elite universities, or even that they achieved up to their own potential. Removing tracking would only ensure equality of access to the knowledge our society values.⁷⁵

If access to knowledge is what schools are really all about, then de-tracking to ensure equal access must occupy a central place in current plans to restructure Boston schools. This effort must begin in Boston's regular education system with the reform not only of grouping practices, but also of curriculum and instruction. The purpose of this effort must be to strengthen the mainstream for all students, including those in specialized programs. Subsequent chapters of this report will detail steps that can be taken to accomplish this goal.

PHOTO: STRIX PIX



Is "More" Really "Less?"

The Mainstream and
Special Education Students

"The integration of special education students into a real school community must be based upon a fundamental reconceptualization of how differences among students can enrich schooling for all.

The effort to create such a common school experience for all children must finally reject the notion that students defined as 'different' are 'deficient.'"

Thus far, this report has examined grouping and placement practices in Boston's "mainstream." But tracking and ability grouping touch other aspects of Boston schools as well. In the placement of students in categorical programs such as special education, the effects of grouping practices extend well beyond Boston's mainstream.

The right to special education is an entitlement grounded in a hard-won campaign to extend educational benefits to students who, only twenty years ago, were in many cases excluded entirely from public schools. Approximately 12,000 students in Boston — one out of every five — receive special education services. These services are provided as a means of realizing every student's right to an equal and appropriate public school education. This right is protected on the federal level by the Education for All Handicapped Children Act (P.L. 94-142), enacted in 1975 to ensure that all children with disabilities receive an education appropriate to their unique needs. The Massachusetts special education law, Chapter 766, not only guarantees an appropriate education to all these children but requires schools to ensure that they will receive maximum feasible benefit from special education in the least restrictive environment.

In Boston, it is common practice to refer students who need extra attention to special education. Indeed, the doubling of Boston's special education placement rate between first and fourth grades suggests how frequently teachers call on special education to help vulnerable children. By the same token, in agreeing to a special education program, parents generally expect that the services provided will give their children the extra help and support they need to progress in school.

This report has already noted that ability grouping and tracking practices in Boston's mainstream tend to allocate the best resources and practices to the strongest students. At the same time, students who most need the best schools have to offer may experience the least effective practices in settings that do little to enhance their learning. Similarly, the experiences of children enrolled in special education in Boston indicate that the implementation of special education often includes practices known to undermine students' educational progress. In fact, special education may frequently function, perhaps unintentionally, as a remedial track within Boston Public Schools. Moreover, the extent to which students requiring special education can benefit from their schooling rests, in large measure, on the extent to which the mainstream itself implements state-of-the-art practices for all children.

The experiences of children enrolled in special education in Boston indicate that the implementation of special education often includes practices known to undermine students' educational progress. In fact, special education may frequently function, perhaps unintentionally, as a remedial track within Boston Public Schools. Moreover, the extent to which students requiring special education can benefit from their schooling rests, in large measure, on the extent to which the mainstream itself implements state-of-the-art practices for all children.

TABLE 15
Boston Public Schools Non-Promotion Rates by Special Education Program (June 1986)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
All Special Education	13.3	11.6	12.5	10.8	12.4
Pull-Out Programs	16.9	15.2	16.1	11.4	16.3
Substantially Separate Programs	6.3	5.8	6.2	9.5	6.2
All Students Systemwide (K-12)	12.7	9.4	12.3	6.8	11.3

Special Education and School Exclusion

While one might argue that by virtue of their disabilities, students receiving special education are more likely to experience the exclusionary practices of non-promotion or suspension, the use of such practices also reflects the choices schools make regarding how to respond to student needs, choices which significantly affect the school experiences of special education students. Specifically:

1. Students placed in special education in Boston, particularly in special education resource room/pull-out programs (defined as prototypes 502.2 and 502.3), are more likely to experience non-promotion than students in the system overall.¹

- While approximately 11% of all Boston students and 12% of all special education students were retained in grade in June 1986, 16% of Boston students in special education resource room/pull-out programs were not promoted that year.
- Students in substantially separate programs (502.4 prototype) are less likely than either special education students overall or all students systemwide to be retained in grade, presumably because progress is assessed according to an Individual Education Plan (IEP) rather than systemwide promotion standards.

Table 15 represents these findings by race.

2. Students placed in special education are more likely to be suspended from school than students in Boston Public Schools systemwide.

- Students in special education — in both pull-out and substantially separate programs — are twice as likely to be suspended as all students in Boston.
- Within all special education programs, African-American students are twice as likely to experience suspension as white students and three times more likely than white students to be suspended from substantially separate programs.

Table 16 details these patterns by race.

TABLE 16
Boston Public Schools Student Suspension Rates* by Special Education Program (1985-86)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
All Special Education	11.1	5.7	6.3	2.1	8.7
Pull-Out Programs	10.5	6.9	5.8	2.9	8.6
Substantially Separate Programs	12.3	3.9	7.1	0.0	8.8
All Students Systemwide (1-12)	6.1	3.2	3.2	0.8	4.4

* Student Suspension Rates *exclude* multiple suspensions and refer only to the number of students suspended per 100 students enrolled.

3. Students placed in special education are much more likely than students systemwide to drop out of school.²

- Special education programs in Boston, regardless of prototype, have a "significantly higher percentage of dropouts" than regular education programs.
- Over a five year period, 59% of all special education students drop out of high school compared to 43% of all "regular" education students.
- In 1987-88, the *annual* dropout rate for special education students in Boston high schools was 19.1 compared to 15.5 for "regular" students in the mainstream and 13.3 for all students (including exam school and bilingual students).
- In 1987-88 the *annual* dropout rate was highest (21.4) for students assigned to the most restrictive resource room/pull-out program prototype (502.3), in which students spend between 25-60% of their time outside regular education programs.
- Students assigned to the 502.3 prototype also have the highest *cohort* dropout rate;³ 62.3% of students in this prototype drop out of school.
- The *annual* dropout rate for Boston's "special schools" — including the McKinley, Carter, and Horace-Mann — increased for three years in a row, registering 19.9 in 1984-85, 25.3 in 1985-86, and 26.0 in 1986-87.
- In 1987-88, the *annual* dropout rate for the McKinley High School alone was 27.9, nearly twice the systemwide average and 50% higher than the rate of 18.9 for substantially separate special education programs within the high schools.
- The *cohort* dropout rate of 59.5 for the McKinley School approximates the dropout rate of 59.3 for substantially separate programs within the high schools.

These data suggest that Boston students placed in special education are all too familiar with stigmatizing school experiences that may contribute to further school failure and alienation from the school community. Indeed, a large body of research concludes that independently the experiences of non-promotion, suspension, or special education placement are strongly associated with dropping out.⁴ If each alone correlates with higher likelihood of early school leaving, together all three experiences may have even greater negative impact on school engagement and success for our most vulnerable students.

Individualization or Fragmentation?

At first glance, these findings may suggest that special education programs are simply not adequate to meet the needs of Boston students. Indeed, many students in special education currently do not receive all the services to which they are entitled.⁵ For many of these students, the failure to receive services may result in their falling further and further behind, until parents seek placement in a private school setting or students give up altogether and drop out of school.

However, while special education students may indeed require more resources than they currently receive in Boston, the solution to the problems in the special education program does not necessarily lie in moving students currently in resource room/pull-out programs to substantially separate classrooms, or students in full-time resource room programs to more segregated settings. To the contrary, both federal and state laws require school districts to provide special education to students with disabilities in the "least restrictive environment," with appropriate support services, precisely to avoid segregation of these students from their peers in the mainstream. But, "least restrictive environment" need not be synonymous with a resource room/pull-out program.

Theoretically, in pull-out or resource room models, students are substantially mainstreamed but receive intensive supplementary services from specially trained teachers. These models are intended to combine the best of both regular and special education. In reality, however, the pull-out model may represent a compromise that does not necessarily provide more intensive instruction and may create numerous new problems.

Students pulled out of their class for resource room work may frequently miss instruction in academic subjects, sometimes even in those core subjects for which they receive special education support — reading and math. Given that their school day is no longer than that of other students, students pulled out of class may not receive additional help but "instead-of" help. In the process, such students may fall increasingly behind their peers in the regular classroom; and while students in special education may profit from small group instruction in resource room, benefits may be short-lived when students return to their large regular classrooms.

Pulling students out of class may also result in less time with a consistent group of students and a primary teacher who together serve as a point of reference for a student's sense of belonging and membership in a school.⁶ The continuity and stability of relationships necessary for the growth and development of the most vulnerable children are less likely when a child's school day is broken into little pieces, and responsibility for that child's progress is dispersed among several adults working apart from the classroom teacher. The fragmentation of the student's educational day and the greater number of adults involved in addressing a child's special need may actually result in less purposeful coordination of the child's educational program and less focused awareness on the "whole child."

Both federal and state laws require school districts to provide special education to students with disabilities in the "least restrictive environment," with appropriate support services, precisely to avoid segregation of these students from their peers in the mainstream. But, "least restrictive environment" need not be synonymous with a resource room/pull-out program.

Indeed, a recent study concluded that pull-out strategies are ineffective, noting that "this split-scheduling approach...is neither administratively nor instructionally supportable when measured against legal requirements, effective schools research or fiscal consideration."⁷ Other studies have noted that students in resource rooms, rather than receiving intensive individualized instruction, spend a large portion of their time working independently at their seats, with little teacher feedback or direct instruction.⁸ Such findings have led some researchers to conclude that the results of a resource room approach depend "largely on the quality of the program," and that "intensive interventions are needed to make a substantial difference in a pull-out program."⁹ These findings suggest that Boston should reconsider its over reliance on pull-out models of instruction for special education students.

The Public Stigma of Separation for "Special Help"

Pulling students out of class makes the label "special needs student" visible for all to see. Indeed, while the pull-out experience is a common one for Boston students identified as needing extra help, whether through special education or compensatory education, it may be no less stigmatizing for being so widespread.

If schools decide that labeling and separating students from their peers is necessary, they must take great care to ensure that the process does not result in stigmatization. At the same time, the potential benefits of the separation must clearly justify its risks. Based on our findings, we fear that for many students assigned to pull-out or resource room models, this is simply not the case.

Pulling students out of class makes the label "special needs student" visible for all to see. Indeed, while the pull-out experience is a common one for Boston students identified as needing extra help, whether through special education or compensatory education, it may be no less stigmatizing for being so widespread.¹⁰ As one student we interviewed noted, even part-time separation from the mainstream can pin negative labels on students:

Sandaya: Mrs. Connelly comes in the morning for kids, and Mr. Packard and Ms. Castro come and get kids and take them out of class. They call the kids who go to Mrs. Connelly, "Connelly Kids."

Interviewer: Who calls them this?

Sandaya: The other kids in the regular class.

Interviewer: Is that an insult?

Sandaya: They think it is.

The negative labels that become attached to students who are separated from their peers substantially influence how others see them. As Richard H. deLone has written for the Carnegie Council on Children, "What starts out as a useful, even necessary diagnostic label tends to stick with a child and may, over time, change from a basis for help to a stigmatizing judgment or self-fulfilling prophecy."¹¹ The pull-out experience, in that it publicly affixes a label on children with disabilities, may have harmful effects on the self-definition of students most in need of a boost to their self-image.

Separation or Isolation?

If part-time separation of special education students from general education fails to meet the educational needs of these students and, furthermore, creates a host of new problems for many of them, placement in substantially separate classrooms can all but institutionalize disabled students as "other" children who have little connection to the mainstream in their schools. Despite this reality, the proportion of all special education students placed in substantially separate settings in Boston schools grew from 22 percent to 38 percent between 1980 and 1987.¹²

The location of special education classes in a physically separate part of a school building may help maintain stereotypes of students with disabilities which, in turn, justify segregation. When asked how he understood the rationale for segregating special education students from others, one general education student we interviewed shrugged his shoulders and then volunteered that it was "probably to protect them." Jeannette, an eighth grader, and James, a high school student, also explained the separation of disabled students in terms of their security. Said Jeannette, "It would be hard to be in my class. Those were mean kids. They'd hurt the special kids, laugh at them, tease them;" and James added, "They can't handle it with the regular kids."

Indeed, "regular" students we talked to indicated that they had little opportunity to learn how to interact with their schoolmates in separate special education classes. As third-grader Cary remarked of students in the substantially separate classroom in her elementary school, "We don't see them much. We don't see them at lunch because the teacher brings lunch to them in their room. And they have recess in their own yard." Likewise, David recalled that a substantially separate class at his middle school was located "in the darkest section of the school — the sixth grade section of the second floor....It was real quiet [there]. Nobody was ever around in the hallways." And Tina, a middle school student, noted, "I think they keep [special education students] in a separate class downstairs."

For years, some parents, educators, and advocates have supported the separation of disabled students from their peers "for their own good," believing that special education students had to be protected from the cruelty of their peers, from overly high expectations, and from the possibility of failure in the mainstream. Today, however, segregation of special education students is illegal; both federal and state special education statutes recognize that for disabled students, separate is not equal. Regulations governing Massachusetts law, known as Chapter 766, state explicitly:

Public education facilities in which programs for children in need of special education are provided shall be such as to maximize the integration of such children into the life of the school and to minimize the separation and stigmatization of such children.¹³

Chapter 766 also specifically prohibits schools from placing special education programs in isolated settings such as those described by our interviewees.

"Regular" students we talked to indicated that they had little opportunity to learn how to interact with their schoolmates in separate special education classes. For example, David recalled that a substantially separate class at his middle school was located "in the darkest section of the school — the sixth grade section of the second floor....It was real quiet [there]. Nobody was ever around in the hallways." Tina, a middle school student, noted, "I think they keep [special education students] in a separate class downstairs."

Special education students, like all students, need learning environments that provide safety and security. But such environments must also include interaction with peers and adults with whom they will share the "real world." Students and their parents should not feel they can have security only by sacrificing meaningful opportunities for growth and development.

Moreover, an extensive analysis of the relationship of special education to general education has found "no compelling body of evidence that segregated special education programs have consistent educational benefits for students. On the contrary, there is substantial and growing evidence that goes in the opposite direction."¹⁴ This analysis reflects a new consensus that while special education students must be supported, they should not be sheltered.

Since "segregation begets segregation...segregated schools produce graduates who have extremely limited chances of functioning in nonsegregated post-school environments."¹⁵ Placement in segregated programs may restrict the future opportunities of students with disabilities; "as a result, many students educated in separate programs find themselves best prepared to function in environments such as sheltered workshops or institutions that continue to segregate and 'protect' people with disabilities."¹⁶ Clearly, special education students, like all students, need learning environments that provide safety and security. But such environments must also include interaction with peers and adults with whom they will share the "real world." Students and their parents should not feel they can have security only by sacrificing meaningful opportunities for growth and development.

Furthermore, in the process of segregating students, schools run the risk of promoting erroneous beliefs and prejudices among general education students that may last a lifetime. Cary, for example, has a relatively simplistic and stereotypical view of her special education schoolmates: "They play a lot, and they ride on buses....They don't know that much. They have problems. They are slow." Asked why she thought special education students were not in her classroom, Patricia simply said, "They don't belong in regular education."

In our view, these comments reflect the failure of both special education and general education to focus on the integration of children with disabilities into the school community. In part, these comments are a symptom of Boston's continuing tolerance for the exclusion from the educational mainstream of students who are "different," and reflect the failure of school communities to define adequately their mission as one that includes the goal of opening the doors of equal opportunity to all students and preparing them to live together in a diverse and democratic society.

Separation As Resegregation?

The isolation of students in special education takes on even greater importance in light of the racial patterns of student placement in specific special education programs. A recent Boston Public Schools analysis of the special education program reveals several trends that indicate that students separated from their peers by virtue of their assignment to resource room programs may also experience racial segregation.¹⁷ For example, this Boston Public Schools report notes:

- Within mainstream prototypes in 1985–86, African-American and Hispanic students were disproportionately found in the most restrictive programs clustered under the 502.3 prototype.
- Within bilingual special education, Hispanic and African-American students are much more likely to be placed in substantially separate programs than their white or Asian counterparts.

Moreover, great variations occur by race when data is broken down by specific program category. These categories include programs for students with various emotional or behavioral disabilities, known as Learning/Adaptive Behavior (L/AB) programs; programs for students with disabilities attributed to mental retardation, generally known as Social Academic Remediation (SAR) programs; and programs for students with various degrees of specific learning, language, speech, hearing, visual, and/or motor difficulty. Many fall predominantly within the substantially separate prototypes 502.4, in which students spend more than 60% of their time in a specialized setting within Boston Public Schools, and 502.4(i), a substantially separate program in a separate facility. Notably:

- African-American students are dramatically overrepresented in categories for students with moderate or severe emotional and/or behavioral disabilities (the L/AB categories) and in those providing instruction for students whose needs derive from retardation (the SAR categories). While African-American students comprise approximately 50% of all Boston students, they represent:
 - 74.4% of the L/AB-Learning Disabled category;
 - 66.1% of the L/AB category;
 - 63.6% of the L/AB-Resource Room category;
 - 59.6% of the L/AB Cluster category;
 - 62.7% of the SAR category;
 - 60.9% of the SAR-Resource Room category.
- While white students make up approximately 25% of Boston's student enrollment, they account for 70% of students classified as "Bright Learning Disabled," a special education classification for "academically advanced" students with learning disabilities. White students are also more likely to be placed in programs related to physical disabilities.
- While Hispanic students comprise approximately 18% of all Boston students, they make up 41.8% of the enrollment in substantially separate programs for students with speech and language problems and 30.5% of substantially separate programs for students with a severe hearing loss. Moreover, Hispanic students comprise 41.7% of the enrollment in substantially separate developmental day care programs for students assessed as having "severe and profound disabilities attributed to mental retardation."

These placement patterns underscore the reality that while students in Boston may be enrolled in officially desegregated schools, they may continue to experience racial segregation in more subtle, but no less insidious, forms.

A recent Boston Public Schools analysis of the special education program reveals several trends that indicate that students separated from their peers by virtue of their assignment to resource room programs may also experience racial segregation. Moreover, great variations occur by race when data is broken down by specific program category.

Boston must introduce more promising implementation models to make disabled students more fully-participating members of their classrooms and schools, principally by introducing special education resources into regular classrooms. Simultaneously, Boston must restructure the mainstream of each school to accommodate the differences and diversity of all students.

Alternative Models for Integration

Boston's heavy reliance on pull-out approaches and substantially separate special education classrooms flies in the face not only of legal mandates but also of much of the recent research on effective special education practice. It reflects, too, a rejection — or perhaps an ignorance — of an integration movement that has gained significant momentum since the United States Education Department proposed the "Regular Education Initiative" (REI) in 1986. Proponents of REI question the value of special classes and pull-out programs for students with disabilities. They argue that such children could be better served if regular classroom teachers worked with special education teachers to develop strategies for teaching all students together.

In Boston the disappointments of the current special education program cry out for a two-pronged strategy to create conditions that allow students with disabilities to succeed in the educational mainstream. First, Boston must introduce more promising implementation models to make disabled students more fully-participating members of their classrooms and schools, principally by introducing special education resources into regular classrooms. Simultaneously, Boston must restructure the mainstream of each school to accommodate the differences and diversity of all students.¹⁸

Adaptive Learning Environment Model

Increasingly, research suggests that students with disabilities may derive greater benefit from full-time integration in a mainstream setting with adequate and appropriate supports than from a resource room placement. For example, a comparison of the achievements, activities, and attitudes of special education students completely mainstreamed with those of a control group pulled out of regular education for help in a resource room found clear benefits for the group integrated through the Adaptive Learning Environment Model (ALEM), an approach developed by Margaret Wang of Temple University. Introduced successfully into many public schools, including schools in New York City, this approach provides team teaching and special supports in the regular classroom while adapting curriculum and pacing instruction to each child's needs.¹⁹

Compared to the resource room model, which requires one teacher and an aide assigned to 11 students and one teacher assigned to the regular class, ALEM assigns 2 teachers and an instructional aide to a class of 45 students. Because ALEM is essentially a new approach to allocating resources within a classroom, the model allows for teachers to spend more time working one-to-one with each child. Students fully mainstreamed in such a setting showed more on-task behavior and greater capacity for tackling independent work, improvements which they transferred to regular education. Moreover, students learned to take responsibility for their own learning, and in doing so, interacted for instructional purposes with both teachers and students more frequently than did resource room students.

After six months in the ALEM classroom, test scores of mainstreamed students reflected equivalent gains in math and greater gains in reading when compared to scores for students pulled out for resource room. Fully integrated students also rated themselves higher in self-esteem, cognitive competence, and social ability than did their counterparts in pull-out programs. Integration of students with special needs did not adversely affect the education of "regular" or "gifted" students, whose reading and math scores also improved in the ALEM setting.

Integrated Classroom Model

A more recent study found similar benefits for the Integrated Classroom Model (ICM), related in approach to the ALEM in that it provides support for disabled students through the adaptation of curriculum and the use of co-teachers in the regular classroom. As James Affleck and his co-researchers note, "By the nature of its design, [ICM] also automatically alleviates some of the longstanding concerns surrounding the resource room program, including the possible stigma caused by a child being pulled out, scheduling frustrations, and coordination of different curricula used in the two settings."²⁰

Consulting Teacher Program

A third model, the University of Vermont's Consulting Teacher Program, offers equally promising results using an approach in which consulting teachers train and assist regular teachers to work in their own regular classes with students eligible for special education. In schools using this model, consulting teachers help regular teachers design and implement programs for students scoring below the twelfth percentile on the Stanford Achievement Test. Students are offered help in the regular classroom, with none spending more than 10 percent of the instructional day outside the mainstream, making many resource rooms unnecessary.

Early evaluation data for this model initially showed no significant results. However, after three years of program implementation, gains for mainstreamed students were dramatic, with reading scores jumping from the fourth to the thirty-seventh percentile and math scores from the second to the twenty-third percentile. In contrast, gains for a control group in a traditional resource room were minimal.²¹

Cooperative Learning

Over the past decade, an extensive body of research has identified structured cooperative learning as an approach that can facilitate the integration of special education students in classrooms with their general education peers. This approach relies on group assignments developed to meet specific learning objectives with progress assessed according to both group and individual performance. Cooperative learning assignments allow all members of the cooperative learning group to participate regardless of skill differences; indeed, successful completion of tasks requires the involvement of students with diverse talents and abilities.²²

Students fully mainstreamed showed more on-task behavior and greater capacity for tackling independent work, improvements which they transferred to regular education. Moreover, students learned to take responsibility for their own learning, and in doing so, interacted for instructional purposes with both teachers and students more frequently than did resource room students.

Given that the mere physical placement of special education students in regular education classrooms does not by itself help such students become better accepted by, or interact more positively with, regular education students, structured cooperative learning experiences can foster the positive relationships between handicapped and nonhandicapped students that are crucial to successful mainstreaming.²³ For example, David Johnson and Roger Johnson point out that the physical integration of non-disabled and disabled students is only the beginning of an opportunity, and that it is the type of interaction among these students — that is, whether students cooperate, compete, or work independently — that determines the success of integration.²⁴ Johnson and Johnson also emphasize the importance of cooperation among regular education and special education teachers. As they note, "it is just as important that regular and special education teachers work together as a collaborative team as it is that handicapped and nonhandicapped children cooperate together in learning situations."²⁵

These four approaches all emphasize that integrated models can reduce segregating practices for "special" students. Indeed, students now pulled out for special attention under the aegis of any categorical program, whether special education, Chapter 1, or "gifted and talented" may benefit from the emphasis on enriching the regular classroom and reducing stigma. To date, Boston has taken few steps toward adopting such approaches.

Refocusing on Effective Practices

Special education requires neither a segregated placement nor a "pull-out" from general education, but can be an integral part of the regular classroom. In thinking of special education as "instructional support" rather than "treatment," administrators at the school level could reorganize resources, including time and staff, to focus on expanding the use of specific effective teaching practices to benefit all students.

The Adaptive Learning Environment Model, Integrated Classroom Model, Consulting Teacher Program, and cooperative learning strategies illustrate that special education requires neither a segregated placement nor a "pull-out" from general education, but can be an integral part of the regular classroom. Moreover, the success of these approaches is evidence that special education as a whole can be reconceptualized, as some researchers suggest, not as a separate system but as an administrative tool to provide professional development and support for the instructional process within each classroom.²⁶ In thinking of special education as "instructional support" rather than "treatment," administrators at the school level could reorganize resources, including time and staff, to focus on expanding the use of specific effective teaching practices to benefit all students. This approach would take special education beyond a medical model which focuses primarily on individual deficits, and move it toward a system that accepts differences among students as a given within the school community.

Separation of special education students from the mainstream is not inevitable; it is a choice. As one review has pointed out, while special education laws require schools to provide services for disabled students, they do not require a special education system. Rather, they do demand "that practice in the schools measure up to the art of what has been demonstrated by the professional to be possible. What is done must be calculated to be effective."²⁷

In this respect, however, the record suggests that Boston Public schools may betray many children in special education. By exposing the most vulnerable children to practices which reinforce school failure and exclusion, such as non-promotion and suspension, special education in Boston may parallel the mainstream's own "low track." At the same time, a reliance on pull-out approaches ensures a school experience largely characterized by "disjointedness."²⁸ While many special education advocates do not trust the regular education system — which in their estimation failed to meet the needs of special education students in the first place — credible alternative approaches coupled with a strengthened mainstream designed to accommodate student diversity demonstrate that public schools do not necessarily have to fail these students.

Redefining School As a Human Community

Integrating disabled students into a restructured mainstream can benefit all students and, in doing so, can challenge Boston to reconceptualize current practices and implement alternatives. A number of studies have concluded that mainstreaming has no detrimental effects on nondisabled students. To the contrary, increased contact among all groups of children can result in more meaningful social interaction, greater acceptance of diversity, and better preparation for future educational and work settings for all students.²⁹

Examples of successful mainstreaming suggest that including disabled students more fully in a strengthened general education program can provide a real-life context for schools to educate students about democracy, equality, and civil rights. Such a curriculum can confront discrimination and prejudice and address the discomfort and awkwardness that many non-disabled students and adults feel upon first encountering people "different" from themselves. As a recent discussion of integration has noted:

Only by bringing young people, disabled and nondisabled alike, together more frequently will we begin to rid ourselves of stereotypes. That is one of the principal benefits of integration, it holds potential for students to learn about each other's humanness, uniqueness, and similarities. By contrast, continued segregation of disabled and nondisabled students can only help foster stereotypes.³⁰

When adults provide children with opportunities to interact with peers who have learning and developmental differences, students will often surpass adult expectations in their ability to focus on others as individuals similar to themselves in their "humanness." Integration of disabled students then enriches learning for all students.

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**MAINSTREAMING TO ENRICH
SCHOOLING FOR ALL STUDENTS**

The comments of nondisabled middle school students who have had the opportunity to interact extensively with a severely disabled student reveal how such contact can deepen and broaden the educational experience for all students. These students began the following interview by describing their classmate "Benjamin" as "a regular human being" who is "just like us:"

Interviewer: **What do you mean a regular human being?**

Student: Well, that he has the same feelings...like sometimes he's having his seizures but most of the time he's busy and happy, and just a regular kid.

Student: Also tell them that you don't just go up to Ben and say, "Oh, what a poor thing." You say, "Quit being so noisy, it's time to work, so just be quiet, and I'll talk with you later."

Student: It's also better if doctors don't fill kids up with medicine so they don't know what is going on.

Student: Oh, one thing. When Ben is absent, everyone says, "Where is Ben?" and we don't usually say this when other kids are absent.

Interviewer: **Why do you ask about Ben?**

Student: Because I guess I miss him. He always — well, most of the time — smiles at me.

Student: Yeah, Ben smiles at you no matter what kind of clothes you have.

Interviewer: **What do you teach Ben?**

Student: I'm teaching him to read, actually to sit quietly and listen, while I read out loud to him. Actually, I'm also learning to read better myself.

Student: In math, we're teaching him how to hold on to the manipulatives, and not just picking them up and dropping them. By the way, is Ben getting a report card?

Student: How to listen. He listens to you when you are trying to talk; he looks up at you.

Student: When you read to him he listens, he looks and holds on to the book.

Student: Yeah, he doesn't mouth off; he goes along with us.

Interviewer: **How do you teach Ben?**

Student: By looking in his eyes and talking to him.

Student: By touching him and saying, "Good job, Ben!"

Student: We also teach him by helping him to do exercises in gym, and walking him around the school and on the playground

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- Interviewer: **What does Ben teach you?**
- Student: He teaches us not to laugh at handicapped people.
- Student: He makes you feel very special, and he's very understanding.
- Student: He teaches me not to worry about problems I have with my speech, that it's o.k., and just to take my time.
- Student: Well, [another student's] brother has a lot of problems being out of control, and he has to be in a place away from home, and her mother wants him to get well and come back to school. Now she can tell me all about it because we all know about Ben.
- Student: I have an older brother like Ben, but he's still with all the little kids at St. James, and I can't figure it out.
- Student: He's one of us. He's nobody different because he's human just like us, and he has feelings just like anybody else.
- Interviewer: **Now I have a question for you: Should kids like Ben or kids having difficulties be separated from the regular classrooms or included? How many think separated? (No hands up.) How many think together? (All hands up.)**
- Interviewer: **Why do you think they are separated?**
- Student: Well, grownups don't know how to deal with these things very well.
- Students: Yeah, grownups get embarrassed and don't know what to do, but they should just ask us kids.
- Students: It might cost less money.
- Students: It might be hard at first before everybody got used to it, but we could just all help.
- Interviewer: **Why is it important for different people to be together?**
- Student: To learn from one another.
- Student: Well, like, if we didn't know Ben and he was out on the playground alone, and someone came up to him and said something mean or did something bad, then we wouldn't pay any attention. But when you know Ben, then you run up to that person and say, "Don't you ever do that again."
- Student: If you're not with people, they don't mean very much.

(Interview with students at the Consentino Middle School, Haverhill, Massachusetts, 1989, by Karla Kirkland.)

More special education students are being placed in substantially separate classrooms while opportunities for success in the mainstream are becoming increasingly narrowed. More stringent promotion policies have placed vulnerable students at even greater jeopardy of failure, and pressure placed on teachers and administrators to produce higher test scores acts as a disincentive for including students with "different" learning styles under the umbrella of "regular" education.

A Narrowed Mainstream: Barriers to Integration

The intent of special education laws was not to establish a service delivery system which would maintain segregated placements and exclude students from the mainstream. Yet a variety of factors, including, among others, a mainstream increasingly less tolerant of diversity, lack of coordinated training for special education and regular education teachers, and categorical funding mechanisms, have contributed to the part-time or full-time separation of 20% of Boston students from their peers.³¹ Placement in special education combined with a rigidly tracked mainstream simply leaves many Boston students with fewer and fewer opportunities for participation in the school community.

In Boston, more and more special education students are being placed in substantially separate classrooms while opportunities for success in the mainstream are becoming increasingly narrowed. More stringent promotion policies have placed vulnerable students at even greater jeopardy of failure without changing the educational practices and conditions that are failing them. At the same time, pressure placed on teachers and administrators to produce higher test scores acts as a disincentive for including students with "different" learning styles under the umbrella of "regular" education.³² Under such circumstances, both teachers and parents may be more strongly motivated to refer students "out" than to keep or draw students "in."

Systemwide policy in Boston has rarely provided direction or resources to support schools or individual teachers who wish to develop successful instructional strategies to reduce the isolation of students identified as "different" from their peers. Professional development does not systematically expose teachers to approaches such as the ALEM, ICM, consulting teacher, or cooperative learning approaches, which have proved successful with diverse groups of students. Moreover, responsibility for integration of special education students into the mainstream is usually seen as the sole responsibility of special educators rather than of the entire system.

Restructuring the Mainstream for Greater Diversity

Given these barriers, however, the most significant ~~obstacle~~ to the integration of disabled students into general education may be the ~~stratification~~ of the mainstream itself. In particular, rigid grouping by ability, even at the elementary and middle levels, may institutionalize special education in many schools as simply a remedial track, the bottom rung on the educational ladder. Within this context, integration may do little more than move students from one low-status position into another equally devalued category within the regular education system in a given school.

A mixed-ability mainstream is essential to the success of any integration effort. In a recent study of outcomes for mildly disabled students mainstreamed in the middle grades, researchers found that students mainstreamed into mixed-ability classes out-performed those mainstreamed into homogeneous low-ability classes, spending more time on task and engaging more with learning materials. They concluded that the presence of peer models in the heterogeneous groups was crucial to student success. Without such models, students mainstreamed in homogeneous classes spent less time on task and were more likely to experience discipline problems.³³

Meaningful integration, then, ultimately depends upon a complete overhaul of the mainstream to embrace heterogeneity and diversity at all levels. Such an overhaul will require the commitment of every school to school-based restructuring and de-tracking to build schools which can improve the achievement of all students and nurture in them the ideals of democracy and equity.

Disabled students do need specialized services provided in a timely way in accordance with the law. They also need assurance that schools' response to their particular needs will not result in continued failure, labeling, and school exclusion, putting them at increased risk of dropping out. District leadership and school-based staff must demonstrate a commitment to mainstreaming that does more than simply place students with disabilities in regular classes without adequate and appropriate support.

Any real reform of special education depends upon a broad effort to turn our schools into communities that reduce isolation for all students and provide enriched curriculum and instruction to students of diverse abilities and talents. The integration of special education students into a real school community, then, must be based upon a fundamental reconceptualization of how differences among students can enrich schooling for all. The effort to create such a common school experience for all children must finally reject the notion that students defined as "different" are "deficient." At the same time, the discussion of restructuring Boston schools must shift to the steps schools can take to extend the most effective practices to all students in each school.

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A LEGAL MANDATE FOR STATE-OF-THE-ART PRACTICE

Just as the public expects manufacturers to use new knowledge, research findings, and innovations to reduce avoidable hazards to consumers, schools must meet state-of-the-art standards to reduce the use of harmful educational practices and apply models of proven effectiveness.³⁴

According to Section 1441 of the Education for All Handicapped Children Act (P.L. 94-142) the U.S. Secretary of Education may make grants

for research and related activities to assist special education personnel, and other appropriate persons including parents, in improving the special education and related services and early intervention services for handicapped infants, toddlers, children, and youth, and to conduct research, surveys, or demonstrations relating to the provision of services to handicapped infants, toddlers, children and youth. Research and related activities shall be designed to increase knowledge and understanding of handicapping conditions, and teaching, learning, and education-related developmental practices and services.³⁵

Congressional reports accompanying the Act underscore the necessity of continually modifying and refining special education techniques and practices in light of current research. Thus, in a recent special education case, the First Circuit Court imposed a *responsibility* upon the states to utilize state-of-the-art research to improve educational services to handicapped children. The Court stated:

It is the state's responsibility to experiment, refine, and improve upon the educational services it provides to handicapped children....Congress clearly saw education for the handicapped as a dynamic process, in which new methodologies would be continually perfected, tried, and either adopted or discarded, so that the state's educational response to each handicapped child's particular needs could be better met.³⁶

PHOTO: MICHAEL SILUK



4 Caught in the Middle

The Mainstream and
Bilingual Education Students

"While the second-class status of bilingual education is reflected conceptually in its definition as a transitional, compensatory program, it is reflected concretely in specific school practices that label students' differences as deficits and separate them from their peers. Inappropriate placement and physical isolation, along with encounters with low expectations, prejudice, and discrimination in the mainstream, present obstacles equally as daunting to these students as the challenge of learning English."

Bilingual education, a primary placement for one out of seven Boston students, functions similarly to special education as a subsystem within the Boston Public Schools. Of the 8,284 Boston students enrolled in bilingual education in 1987-88, more than half (53.3%) were Hispanic; Asian and African-American students each made up 21% of the bilingual enrollment; and white students comprised 4.5%.¹ While not specifically a "track," the bilingual program can not be ignored in a comprehensive analysis of grouping practices in Boston.

Enacted nationally in 1968 and in Massachusetts in 1971, bilingual education laws mandated programs for growing numbers of students who, in many cases, had been formerly excluded from school because they did not speak English.² Bilingual education in Massachusetts entitles students who are not fluent in English to an educational program that provides them an opportunity both to learn English and to sustain momentum in academic subjects, while retaining their native language and knowledge of their cultural heritage. For good reason, this approach has broad support among parents, bilingual educators, and community leaders. Despite rhetoric to the contrary, its success is well documented and grounded in knowledge about students' acquisition of a second language.³

A large body of research conducted over many years concludes that for many students, successful acquisition of the second language depends on continued academic instruction in the first language. Students in bilingual education programs regularly perform better in all academic areas than their peers in programs such as "Sheltered English" or "English-only" which do not continue native language use. Indeed, the interruption of cognitive development in the first language while students are acquiring the second language may result in lower proficiency levels in the second language and in the inhibition of students' overall cognitive-academic growth. Furthermore, experts suggest that instruction in the first language should be sustained for far longer than it takes students to acquire basic skills in the second language.

Boston's data suggest that students placed in bilingual education are somewhat protected from the harmful and exclusionary practices of the mainstream. Moreover, the "holding power" of bilingual programs appears to reduce the chances of dropping out for some students. Specifically:

TABLE 17
Boston Public Schools Bilingual Non-Promotion Rates (June 1986)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
All Students Systemwide (1-12)	12.7	9.4	12.3	6.8	11.3
Bilingual Non-Promotion Rate	13.5	4.2	9.9	9.5	10.1

TABLE 18
Boston Public Schools Bilingual Student Suspension Rates* (1985-86)

	AFRICAN-AMERICAN	WHITE	HISPANIC	ASIAN	ALL
Student Suspension Rate Systemwide (1-12)	6.1	3.2	3.2	0.8	4.4
Bilingual Student Suspension Rate	1.8	0.9	1.6	0.7	1.4

* Student Suspension Rates exclude multiple suspensions and refer only to the number of students suspended per 100 students enrolled.

1. Students in bilingual programs are somewhat less likely to experience grade failure than students systemwide.

- The non-promotion rate for bilingual students is 10.1 compared to 11.3 systemwide.
- Hispanic and white students in bilingual programs — representing nearly half of all bilingual students — experience non-promotion less frequently than their peers systemwide.

2. Students in bilingual education are much less likely to be suspended than students systemwide.

- Overall, students in bilingual programs are one-third as likely to be suspended as students systemwide.
- Suspension for students in bilingual programs is much less likely than suspension for all groups systemwide, especially for African-American students who have the highest chances of suspension across the district.

These findings are detailed in Tables 17 and 18.

3. Students in bilingual education are less likely to drop out of school than their counterparts outside of bilingual education; indeed bilingual education appears to act as a buffer against dropping out.⁴

Specifically:

- In 1987–88, 13.1% of all students in bilingual education classes dropped out compared to 16.8% of their regular education peers (matched by first language).
- Of students enrolled in ninth grade in 1983, 38.2% dropped out of bilingual programs over the subsequent five years compared to 42.2% who dropped out of regular education programs.
- While Hispanic students have the highest dropout rates in Boston, Hispanic students in bilingual programs were less likely than their peers not in bilingual education to drop out of school in 1987–88. However, students in Spanish language bilingual programs had the highest annual dropout rate (16.8) of all language groups in bilingual programs, followed by Vietnamese students at a rate of 16.4.
- Chinese students in bilingual education have the lowest annual dropout rate of all language groups (2.7).

Clearly, bilingual education in Boston offers some degree of protection from academic failure, school exclusion, and dropping out. Yet further examination of the relationship between bilingual education programs and Boston's mainstream suggests that these benefits do not carry over when students move into general education. Indeed, the evidence suggests that Boston schools have failed to capitalize on the potential of the bilingual program to enrich the education of all students.

Bilingual education in Boston offers some degree of protection from academic failure, school exclusion, and dropping out. Yet the relationship between bilingual education programs and Boston's mainstream suggests that these benefits do not carry over when students move into general education. Indeed, the evidence suggests that Boston schools have failed to capitalize on the potential of the bilingual program to enrich the education of all students.

Ready or Not: The Transitional Model and the "Quick-Exit" Definition of Success

By defining students' academic ability largely in terms of their knowledge of English, the transitional, compensatory model of the bilingual program relegates bilingual students to second-class status within their schools and may reinforce the physical and social segregation of these students from their peers in the mainstream.

Despite the benefits provided students in Boston's bilingual program, the conceptualization of bilingual education as a transitional, compensatory program, with success measured by how quickly students leave the program, poses a serious risk to the achievement of bilingual students and limits the program's potential contribution to the education of all students. This "quick-exit" definition of success often causes students to be pushed into the mainstream before they are fully prepared, which may result in serious academic and social problems. In addition, the transitional, compensatory model assumes that students' differences are deficits that must be remediated before students may participate in the regular education program. By defining students' academic ability largely in terms of their knowledge of English, this model relegates bilingual students to second-class status within their schools and may reinforce the physical and social segregation of these students from their peers in the mainstream.

While bilingual students may attain conversational fluency in English after a few years' exposure to the language, students' verbal-academic fluency evolves much more slowly. A recent synthesis of academic research has found that even when students are schooled in two languages, with solid cognitive-academic development provided in both the first language (L1) and the second language (L2), "students generally take from four to seven years to reach national norms on standardized tests in reading, social studies, and science, (measures of thinking skills), while their performance may reach national norms in as little as two years in L1 and L2 tests in mathematics and language arts (the latter testing spelling, punctuation, and simple grammar points)."⁵ Mistaking conversational fluency for cognitive-academic language proficiency, school staff and policy-makers frequently assume conversationally-fluent students are ready for the all-English mainstream.

However, once former bilingual program students are in the mainstream, school staff may confuse their language difficulties with their academic potential and thus lower expectations for their success. This underestimation of these students' abilities may result in misplacement in special education or in a low-level mainstream ability group. In this way, these students may be unfairly excluded from access to knowledge and school settings that could significantly increase their chances of academic success.

Moreover, while bilingual students' English skills and their unfamiliarity with many aspects of American culture may indeed put them at a disadvantage in our schools, their own cultural heritages and their ability to speak their native languages are not, and should not be treated as, handicaps. Indeed, the presence of students from diverse backgrounds offers Boston a significant opportunity to create school communities that prepare all students for the multicultural society they are likely to face in the coming century.

Rather than seizing this opportunity, however, Boston schools seem to be sending their bilingual students the message that "different" linguistic and cultural backgrounds represent a problem that must be corrected. These messages often create feelings of isolation and marginality for these students, particularly once they enter the mainstream, and contribute to a school climate in which bilingual students experience prejudice and hostility toward cultural difference.

In-School Separation of Bilingual Students from Their Peers

While the second-class status of bilingual education is reflected conceptually in its definition as a transitional compensatory program, it is reflected concretely in specific school practices that label students' differences as deficits and separate them from their peers. The comments of Boston students whose first language is not English highlight the reality that inappropriate placement and physical isolation, along with encounters with low expectations, prejudice, and discrimination in the mainstream, present obstacles equally as daunting to these students as the challenge of learning English.⁶

Placement Practices: Breaking with Familiar Age and Cultural Bearings

Several students we interviewed related the shock and shame they experienced when they entered Boston schools and were placed below their appropriate grade, an experience they perceived as a literal "put down." Zaida, a tenth grader at Boston Technical High School, who attended bilingual classes in the third, fourth, and fifth grades at a Boston elementary school, explained, "I finished third grade in El Salvador, but I had to take it again here because I didn't know English. I should be in eleventh grade now."

Similarly, Francisco described how the inflexible placement structures of his elementary school caused him to be assigned to a math class that was below his ability level, thus forcing him to repeat academic material he had already learned: "I was mad because when I got here I was at the fifth grade level in math, but they put me in the third grade because I couldn't speak English." Even at that young age, Francisco was indignant at the insensitivity of a system that defined his "ability" solely in terms of his lack of English and separated him from his age-appropriate peers.

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The anger these students felt at their "demotion" was often compounded by the expectations of teachers who, while they may have spoken the student's home language, might not necessarily have understood the cultural norms characteristic of a particular student's country of origin. As Rosa explained:

It was hard for me. I had just learned how to read and speak Spanish in Guatemala, and now I had to learn English. And there are such different rules, like with pronunciation. In Spanish mostly everything is spoken, but in English almost nothing is. It was also hard to adjust to other rules — like in Guatemala you're expected to do all the work in your head, like a math problem, for example. Here the teachers want to see everything, so they say it's wrong, or they mark you down. It's not fair. They don't understand.

Such observations highlight the multiple challenges faced by students who must cope not only with the task of learning a new language but also with that of adjusting to cultural norms that may be significantly different from those familiar to them.

Physical Separation in the School Building

Students who have experienced bilingual placements told us that their bilingual classes were places where they felt isolated in relation to the rest of the school, describing their position as "to the side of," "outside," "on the edge of," or "below" the rest of their school, phrases which were often literal descriptions of the physical location of their classes in the school.

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As with special education, the separation of bilingual education programs may provide some bilingual students relief from the prejudice they experience in their schools. As Roberto explained:

Learning a new language is difficult. Most of the other kids put us down because we spoke two languages. It bothered them that we spoke Spanish. It's strange because I thought knowing a lot of languages is good, and here they were putting us down and picking on us. Having our class separate shielded us from that harassment.

But the attempt to "protect" students who are "different" from others in the school is a poor excuse for isolating these students from their peers. Instead, what is clearly needed is a campaign to reduce the racism, "harassment," and intolerance of diversity in the mainstream that make separation seem desirable and impede the development of a school community that includes all students.

Indeed, the separation of bilingual students from others in the school introduces a sense of "us" and "them" into the school experience of many language-majority students as well. When we asked general education students if they had a chance to be with bilingual students in school, we found that many scarcely knew whether their schools had a bilingual program. Most general education students who were aware of bilingual classes at their schools agreed with their bilingual classmates that such programs were "separate" or "really separate" from the rest of the school. Diana, an eighth grader, reported that bilingual classes "are not really considered part of the school." While some of these students said that bilingual education students participated in their gym classes and in nonacademic classes such as art and industrial arts, such limited contact between bilingual and language-majority students falls far short of the potential for intergroup learning that can enrich school life for all students.

Being "Different" in the Mainstream

Given the combination of "quick exit" policies and the virtual segregation of bilingual classes from the rest of the school, it is not surprising that the transition of many bilingual students into the mainstream is far from smooth. When bilingual education is defined as a remedial program and, at the same time, implemented in a setting outside the mainstream, bilingual education students are likely to develop feelings of inadequacy and marginality in relation to others in their school. These feelings intensify as bilingual students enter the general education mainstream.

Still carrying the label "limited English proficient," many former bilingual program students describe continual encounters with stereotyping and prejudice which reinforce their sense of isolation, inhibit their academic and social development, and cause them to feel like unwelcome guests in their schools despite their "integration" into mainstream classes. Their comments illustrate how problems sometimes associated with bilingual education may actually reflect problems in the relationship of bilingual education to the structure of the whole school and the failure of the school itself to welcome diversity. Their stories also suggest how the infusion of bilingual/bicultural experiences into the whole-school community could enrich the mainstream itself.

"Put Downs," Prejudice, and the Stress of Exclusion

Many bilingual students described their experiences in Boston's "regular" classes as involving painful encounters with stereotypes and labels that set them apart from — and at odds with — the dominant school culture. "Saying 'bilingual,'" said one student, "puts a stigma, a stereotype on you," a comment with which many students agreed. Feeling "put down" within their schools and perceiving that "[other students] feel we're below them," and that "just because we're Spanish, we're left out," many bilingual students now in general education classes feel pressured to abandon their language and culture. Indeed, many have come to understand that their cross-cultural experience, rather than being considered an asset, may provide an excuse for classmates to make fun of them. Said David, "I thought classmates would welcome having a student from another culture. Boy, was I wrong! They teased me, laughed at me."

Still carrying the label "limited English proficient," many former bilingual program students describe continual encounters with stereotyping and prejudice which cause them to feel like unwelcome guests in their schools despite their "integration" into mainstream classes. Indeed, many have come to understand that their cross-cultural experience, rather than being considered an asset, may provide an excuse for classmates to make fun of them. Said David, "I thought classmates would welcome having a student from another culture. Boy, was I wrong!"

**"YOU HAVE TO LIVE IN SOMEBODY
ELSE'S COUNTRY TO UNDERSTAND"**

What is it like to be an outsider?

What is it like to sit in the class where everyone has blond hair and you have black hair?

What is it like when the teacher says, "Whoever wasn't born here raise your hand."

And you are the only one.

Then, when you raise your hand, everybody looks at you and makes fun of you. You have to live in somebody else's country to understand.

What is it like when the teacher treats you like you've been here all your life?

What is it like when the teacher speaks too fast and you are the only one who can't understand what he or she is saying, and you try to tell him or her to slow down.

Then when you do, everybody says, "If you don't understand, go to a lower class or get lost."

You have to live in somebody else's country to understand.

What is it like when you are an opposite?

When you wear the clothes of your country and they think you are crazy to wear these clothes and you think they are pretty.

You have to live in somebody else's country to understand.

What is it like when you are always a loser?

What is it like when somebody bothers you when you do nothing to them?

You tell them to stop but they tell you that they didn't do anything to you.

Then, when they keep doing it until you can't stand it any longer, you go up to the teacher and tell him or her to tell them to stop bothering you.

They say that they didn't do anything to bother you.

Then the teacher asks the person sitting next to you.

He says, "Yes, she didn't do anything to her" and you have no witness to turn to.

So the teacher thinks you are a liar.

You have to live in somebody else's country to understand.

What is it like when you try to talk and you don't pronounce the words right?

They don't understand you.

They laugh at you but you don't know that they are laughing at you, and you start to laugh with them. They say, "Are you crazy, laughing at yourself?"

Go get lost, girl."

You have to live in somebody else's country without a language to understand.

What is it like when you walk in the street and everybody turns around to look at you and you don't know that they are looking at you.

Then, when you find out, you want to hide your face but you don't know where to hide because they are everywhere.

You have to live in somebody else's country to feel it.

(Noy Chou, Ninth grade, "You Have to Live in Somebody's Country to Understand," Unpublished poem.)

Former bilingual program students described feelings of increasing vulnerability in the mainstream, some noting that many of their peers ultimately responded to the stress of a hostile school climate by dropping out. Mariana, a student whose family emigrated from the Dominican Republic, noted that native English-speaking students "think we're much, much under them. They want to step on us, and it shouldn't be like that. That's why some of the students drop out of school." Wiliberto, a Puerto Rican student, agreed:

They use you as a joke. The American kids start making fun of you — the way you dress. If you're not wearing Adidas, you're not 'joined in,' and some people can't take it, some people can't take that laughing at them.

Others related incidents that illustrated the problems encountered by students who have fluent conversational abilities but have not yet mastered cognitive/academic English skills. As Julio reported:

I tried regular classes, but the teachers just wanted me to do more and more American work. They couldn't help me. Some of them even sent me to get help from a bilingual teacher.... Once a teacher called me a 'Spic' right in the class.

As such encounters with discrimination in the mainstream accumulate, many students find themselves without the support they need to deal with the prejudice and discrimination they encounter and to confront the stress of being "an outsider." When we asked Roberto what he thought his former classmates from his bilingual elementary school program were doing today, he answered, "I don't know. I don't see many of my classmates from back then. I think a lot of them are like hoodlums now. They couldn't handle the pressure."

Discrimination by Expectation

Former bilingual education students suggested that the negative attitudes and low expectations of school staff also contribute to school failure and early school leaving among bilingual students. Many students felt they were not sufficiently challenged academically in the mainstream, a situation that Richard deLone has called in another context, "discrimination by expectation."⁷ As Jovita explained, "When I was younger, the teachers wouldn't call on me. Simply because I was Hispanic...they thought I couldn't work up to my ability." And Angelina outlined the connection between expectations, motivation, and performance:

They don't expect enough from us, and if they don't expect enough, we can't give enough. The more they expect from us, the more we can give.... Once they get us going, we can go as far as they can push us.

Wiliberto agreed, but emphasized that challenges must be offered in a context of nurturing and support. He explained:

Nobody wanted to push me because they thought I would fall over the edge. We have to be challenged. We need challenges; we need support; we need love; we need comprehension.

Former bilingual education students suggested that the negative attitudes and low expectations of school staff also contribute to school failure and early school leaving among bilingual students. Many students felt they were not sufficiently challenged academically in the mainstream. As Jovita explained, "When I was younger, the teachers wouldn't call on me. Simply because I was Hispanic...they thought I couldn't work up to my ability."

Indeed, the emphasis on hurrying bilingual program students into all-English classes may contribute to a feeling among school staff that little attention need be paid to providing these students with academic challenges other than learning English. These limited expectations for academic success may then follow these students into the mainstream.

Uncertainty About "Belonging," Identity, and Membership in the School

Above all, these students feel that schools are sending them the message that acceptance and a sense of belonging can be achieved only at the cost of abandoning their heritage. And while many of these students yearn for the respect and acceptance of their teachers and peers, many feel that giving up their own cultural identities is simply too high a price to pay for this acceptance.

The comments of former bilingual program students make it clear that the more students experience low expectations, discrimination, and stereotyping, the more uncertain they feel about their self-worth, cultural identity, and membership in their school. Indeed, the mixed messages schools send bilingual students about their status in Boston schools leave many of these students feeling pulled in opposite directions. Moved into mainstream classes, these students are often told to go back to their bilingual teachers for extra help and support. When they speak the language of their home, they are told to speak English, but when they speak English, others make fun of their pronunciation. And finally, in the "melting pot" mainstream, their particular identities as Puerto Rican, Colombian, Dominican, Salvadoran, Guatemalan, Cambodian, Vietnamese, Chinese, or Laotian are reduced to "Hispanic" or "Asian" — terms which reflect a North American perspective and fail to acknowledge the manifold distinctions among different nations and cultures.

As several students suggested, language-majority students and school staff rarely seem interested in looking beyond the label "bilingual" or "limited English proficient" to see bilingual students as distinct from each other by virtue of their unique cultural backgrounds. Hispanic students in particular felt that teachers viewed them as all alike. Angelina elaborated:

Teachers don't learn from us. They don't ask. They don't let it be known to other students who we are. We're not all Puerto Ricans, [but] teachers don't help to distinguish. It's real hard to be somebody in a place where they don't know who you are. They don't know what you feel.

These students described how their own struggle to be seen as individuals, "as people, like human beings that have a mind and a heart," was tied to a struggle to preserve their identification with and loyalty to their own culture. Above all, they feel that schools are sending them the message that acceptance and a sense of belonging can be achieved only at the cost of abandoning their heritage. And while many of these students yearn for the respect and acceptance of their teachers and peers, many feel that giving up their own cultural identities is simply too high a price to pay for this acceptance.

Reconceptualizing the School Community As a Global Village

Despite their discouragement, some bilingual students still envision a truly multicultural school life and insist that the integration of their linguistic and cultural backgrounds into "regular" education would benefit all students. One student, lamenting that schools "want to monoculture you," suggested it was time to replace the image of America as a "melting pot" with one of a "tossed salad." Elaborating on this view, Angelina articulated her vision of how bilingual students can enrich life in Boston's public schools and beyond:

They want us to learn English and lose our cultural backgrounds, [but] I think there's a way we can work on the culture [we have already] and build it to be strong and better than what they are and we are. Two things combined can be very good. We take the Spanish culture and the English culture — we can be great students, we can be great people, we can be great leaders of this country. Just because we're Spanish, we don't have to lose our cultures. Latin Americans are Americans too.

Boston could begin to address the special concerns of its bilingual students by defining its schools as "global villages" and creating a norm that recognizes the ability to speak several languages and understand several cultures as talents valued as highly as the ability to achieve high scores on standardized tests. Making this norm a reality would also benefit native English-speaking students by exposing them to other languages and cultures regardless of their formal academic program.

In fact, many English-speaking students we talked with also seek a more multicultural experience in their schools, including greater interaction between bilingual and general classes and second language instruction for both groups. "Try to get us together more — not just at lunch," suggested several language-majority students. Others proposed that their schools offer second language instruction to all language-majority students, not just those in Advanced programs. Still others recommended that their schools introduce classes co-taught by one English-speaking and one Spanish-speaking teacher: "They could teach them a little English and us a little Spanish," one student suggested.

Most of these students equated "bilingual" with "Hispanic," and some of their suggestions for achieving greater integration between language-minority and language-majority students are thus likely to be most successful when the language-minority students speak a language as widely used and valued as Spanish. Yet, modifications of their proposals might be adopted to promote cross-cultural integration with students of other cultural and linguistic backgrounds as well. For example, exposure to a second language and culture could be integrated into thematic curricular units that incorporate the study of language, geography, science, art, and history. Even the hanging of the flag of every country represented by students in each school and the translating of all school signs would communicate the message that students do not have to leave their cultural identities behind them at the schoolhouse door and would begin to reflect more accurately the diversity of Boston in 1990.

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While many Boston schools observe an "International Day" once a year or introduce a multicultural focus at holiday time, multicultural education must be conceptualized as a *process* of learning, not simply as a set of activities. Based on the premise that learning about other cultures begins with self-discovery, such learning must evolve from teachers' and students' together discussing, analyzing, and reflecting on their own backgrounds.

Infusing Students' Culture and Language into Mainstream Learning and Teaching

As we have noted, students are frequently pushed out of bilingual programs without adequate preparation for the mainstream. Yet our interviews with students also indicate that the mainstream may not be adequately prepared for them. Neither curricular nor extra-curricular activities currently address to any significant degree the concerns raised by students with whom we talked.

In particular, the Hispanic students we interviewed suggested that the integration of their language and culture into the regular school day would reduce their feelings of alienation and marginality and increase their self-esteem and self-respect. Yet such integration occurs infrequently. Asked how often she had the opportunity to read about, research, or report on Guatemala, her family's homeland, tenth grader Gladys thought for a moment, then replied, "We got to study it a little, once in sixth grade." Gladys enthusiastically reads *National Geographic* articles on Central America, and her summer reading last year included the autobiography of Rigoberta Menchu, a peasant leader of Guatemala, but such interests are not incorporated into her school's curriculum.

Likewise, several Hispanic students described how their culture and language are discounted even where they might be introduced as significant resources for all students. As Roberto declared:

Our Spanish class now is really stupid. We're taught the Spanish of Spain, not Latin America, even though most of the kids are from Latin America. They teach us *vosotros* — no one *ever* uses *vosotros* anymore. All the vocabulary and idioms are different. The Spanish kids have to work harder at it than the English kids!

Roberto is a successful sophomore at Boston Latin School and his ability to critique this class and express his outrage at the way it devalues his linguistic heritage is a great strength. But students with fewer supports than he has are likely to experience such a situation as a double bind in which they can achieve success only at the cost of alienation from their own culture.

Boston schools could begin to ease this dilemma by emphasizing multicultural activities as a core underpinning of curriculum and instruction for all students. While many Boston schools observe an "International Day" once a year or introduce a multicultural focus at holiday time, multicultural education must be conceptualized as a *process* of learning, not simply as a set of activities. Based on the premise that learning about other cultures begins with self-discovery, such learning must evolve from teachers' and students' together discussing, analyzing, and reflecting on their own backgrounds. Within this context, teachers must take on a variety of non-traditional roles: mediating knowledge across cultures, clarifying values of different cultures relative to each other and to a body of common human values, co-investigating oppressive social situations with students, and transforming such situations through action.⁸

Integrating Bilingual and General Education within the School Community

For linguistic minority students, a total school environment that defines bilingualism as an asset rather than a liability is crucially important to their school achievement. In addition, the recognition that language-minority students can contribute to the language and cultural learning experiences of language-majority students studying a second language, an outcome demonstrated in the two-way bilingual education approach, can enhance their sense of belonging in their schools. In fact, the integration of bilingual and monolingual students can provide significant social and affective benefits to both groups and foster more positive intergroup relations within the entire school community.

Moreover, improved integration of bilingual and general education must extend to the teaching staff itself.⁹ Teachers and parents in Boston often comment that bilingual teachers, like their students, are isolated in their schools. Frequently operating in their own "cluster" and appearing more accountable to the bilingual program administrators downtown than to the principal in their school, bilingual education staff may have little contact with general education teachers.

As a consequence of such isolation, bilingual teachers, like their students, are often perceived as having low status. One educator we talked with told this story:

[Bilingual students] were working on vocabulary in their class, and their teacher asked them to define the word "promote." "How would you use this in a sentence?" she asked. "For example, if I were promoted what would I be?" The answer coming from one student was not "Assistant Principal" or "Principal," but "A real teacher."

Making bilingual staff available to work with students and teachers in "regular" education would create a more diverse mainstream, provide support for former bilingual education students, and expand schools' capacity to communicate with students' parents. It would also send the message to bilingual and general education students alike that bilingual teachers are "real teachers" too.

At the same time, central office staff must ensure that staffing patterns at all schools more closely reflect the diversity of student enrollment than they do now. By the end of the 1988-89 school year, 79 schools in Boston, enrolling 2,336 Hispanic students, had no Spanish-language bilingual programs and 66 had no Hispanic bilingual/bicultural staff.¹⁰ While Boston plans to remedy this situation, beginning by placing Spanish-speaking bilingual staff in those schools enrolling 50 or more Hispanic students, the creation of schools that are global villages requires every single school in Boston to employ bilingual/bicultural staff who reflect the diversity of the student body. Such staff are crucially needed at all levels to serve as guides, advisors, and role models for minority students.

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**TWO-WAY BILINGUAL EDUCATION:
A PROMISING ALTERNATIVE**

Reducing the isolation of bilingual students and easing the difficulties such students encounter in Boston's mainstream clearly requires the development of alternatives to the transitional, compensatory model of bilingual education. Perhaps the most promising alternative to the existing approach is the two-way model, which employs two languages, one of which is English, for purposes of instruction and serves students who are native speakers of both.¹¹

Bilingual education experts increasingly are advocating the adoption of two-way bilingual education as a strategy that offers significant advantages over more traditional models of bilingual education. Explains James Lyons, Executive Director of the National Association of Bilingual Education, advocates for limited English proficient students "have always seen transitional bilingual education as a short-sighted model: remedial and compensatory but better than nothing." Transitional bilingual education, or TBE, has always had the critical limitation of being "fundamentally irrelevant to English-speaking children."¹² Thus, TBE programs were traditionally separated and isolated from the rest of the school.

Two-way bilingual programs address the concern that bilingual education programs segregate children by language ability, and consequently, often by race and ethnicity. By definition desegregative, two-way programs have proved to be an effective way by which students with limited knowledge of English may be integrated into the educational mainstream. Moreover, in contrast to the common conception of bilingual education as compensatory or remedial, two-way programs view limited-English speaking students as proficient in their home language rather than as deficient in English.¹³

Two-way bilingual education offers benefits for both limited-English proficient and English-speaking students alike, improving the English language skills of students whose English is limited while providing foreign language instruction for native English speakers. The native language skills of each group are used as resources for the other; second language proficiency is enhanced by the availability of peers who are native speakers of the second language and who can serve as models for language use. In addition, two-way programs generally improve the status of bilingual students in the school by legitimating their language and culture as important topics worthy of academic study. Such programs also help these students become acquainted with and adjust to the dominant culture of the school without having to sacrifice their cultural identities.

Likewise, the two-way bilingual approach fosters integration in that it "sensitizes the English-proficient student to the difficulties of learning another language," explains Carmen Perez Hogan, Chief of the Bureau of Bilingual Education for the New York State Education Department; as a result, both groups of students come to see that "they're in it together."¹⁴ Perhaps most importantly, since language-minority and language-majority students learn side by side in the same classrooms, they come to see each other as people and not in terms of cultural stereotypes. Two-way programs thus expand the cultural awareness of both groups.¹⁵

Training for All Boston Teachers in Multicultural Issues

Special training for all Boston teachers in multicultural issues is critical if Boston schools are to become "global villages." While discussions of multicultural education have generally focused on curriculum, teaching practices themselves also deserve attention. Indeed, general education teachers may not be aware that specific classroom activities can help former bilingual students succeed in the mainstream.

Virginia Vogel Zanger, a consultant and educator in multicultural issues, has identified a number of linguistic, social, and cultural strategies teachers can adopt to enhance the likelihood of success for limited-English speakers.¹⁶ She offers the following suggestions to teachers:

- Before presenting a lesson, put yourself in the shoes of a student new to our language and culture. Make explicit the background information, key vocabulary, and cultural assumptions that the student will need to know in order to understand. Teach vocabulary in context, not in isolated lists, and group together related words.
- To make yourself clear, *rephrase* rather than repeat or talk louder. Monitor your own language, eliminating idiomatic expressions and complicated verb tenses as much as possible until the child's English is more developed.
- Continually reassess your students' language and comprehension so that you can respond appropriately.
- Accept and encourage all efforts at communication. In general, do not correct: respond to meaning, not to form. Content is primary, form will follow.
- Encourage children to use their stronger language to learn concepts. Allow students from similar language backgrounds to work together if it helps them clarify what you are trying to teach. Encourage parents to strengthen the first language. It is far easier to build on a strong foundation than a weak one.
- Structure small-group activities so as to draw on the strengths of the linguistic minority students. It can be demoralizing to always be in the position of being helped.
- Look for opportunities to raise the social status of linguistic minority students. Get to know them personally, so that you will be better able to enable them to share their strengths with the class, including the wealth of their experiences in two (or more) cultures and languages.
- Provide children with the opportunity to communicate with peers in meaningful interactions. Assign small-group activities where students must use their new language to accomplish joint tasks. Make sure to structure them so that all members of the group must participate.
- Use a buddy system for new arrivals.

While discussions of multicultural education have generally focused on curriculum, teaching practices themselves also deserve attention. Specific classroom activities can help former bilingual students succeed in the mainstream.

While teacher training alone cannot transform the school into a global village, it can begin a process of self-assessment necessary for such transformation. Moreover, this process can begin in small ways based on the sharing of ideas and innovations among teachers in each school, emphasizing that teachers' practices must be at the center of reform.

- Model the cultural proficiencies you expect your class to develop:
 - Learn from your students about their cultures. Be respectful: the rest of the class will learn from your example.
 - Be especially sensitive: many political and economic refugees may have painful pasts and immigration problems.
 - Share the wealth of your own cultural roots: talk about specific ways in which your family has retained its ethnic heritage as well as what they gave up.
- Structure the curriculum so that students can learn from each other about cultural similarities and differences. Work to reduce stereotyping and ethnocentrism by teaching students to discuss differences in a nonjudgmental way. Peer interviewing is one technique, group projects are another. Involve parents in sharing their culture.
- Provide students with the opportunity to explore their own cultural backgrounds. Assign individual or joint projects which use oral history techniques such as interviews with family and community members, as well as traditional library research methods.
- Relate whatever you are teaching to the cultural backgrounds and real life experiences of your students, if possible. Search for culturally relevant materials, but above all, use the students themselves as resources.
- Collaborate with bilingual classes and staff members to explore cultural similarities and differences.
- Establish a "sister class" relationship with a class in the country (or school) from which your students come. Writing to pen pals is only one possible activity; also consider exchanging class projects such as a newspaper or "culture capsule."

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Addressing Inter-Cultural Conflict

An effort to strengthen the mainstream for bilingual students must finally address continuing conflict among different groups of students. A negative school climate frequently reflects the inattention of school leadership to the promotion of positive intergroup relations which can smooth the transition of bilingual education students into the mainstream. Many Boston schools began to address intergroup conflict in the early years of desegregation when a variety of resources were directed toward expanding opportunities for interaction between African-American and white students who had had little school contact prior to 1974. However, Boston has not yet applied the lessons of those years to the process of welcoming students from culturally diverse groups. As one student from Bolivia noted:

They say they have multicultural programs for different backgrounds, cultures, communities, but that isn't true all the way. They only focus on certain ethnics, but they don't really focus on ours.

Students' comments challenge school leadership to build on past successes of integration and develop educational approaches to reflect the experiences of all groups. The effort to establish such a multicultural orientation should take into account not simply language but also the cultural backgrounds of the student population, and should have as its goal the maximum integration of diverse cultures into all aspects of the school program. Above all, schools must not be permitted to abdicate their responsibility to establish an atmosphere of understanding and respect for all students and school staff.

Bilingual Education: A Cornerstone of Restructuring

Students' comments make it dramatically clear that the restructuring of Boston schools must include a new focus on the relationship of bilingual education to the mainstream. Rather than viewing bilingual education students as "deficient" in English, schools must focus on their strengths and see them as "proficient" in their home language. Rather than ridiculing or devaluing students' cultural background and home language, school staff must work to conserve them and use them as building blocks for the education of all students for the multicultural world of the 21st century.

The image of the school as a global village can guide school-based reform toward greater heterogeneity throughout Boston's mainstream. Bilingual education can make a significant contribution to this effort, one that reduces the isolation of "different" students, welcomes diversity, and extends the best practices of the program to the entire school. Such efforts are particularly critical in Boston where the 1980 Asian population is expected to double and the Hispanic population expected to grow at a rate of 41 percent by the year 2000.¹⁸

As with special education, however, the bilingual program can not achieve such reform acting alone. School-level leadership must carefully plan and manage the integration of bilingual and general education programs into a coherent educational system that challenges and nurtures all students in the school. Enlightened administrators and teachers must work together with all members of the school community, not to devalue or dismantle bilingual education, but to recognize and use it as a resource in the restructuring of schools to promote and strengthen a citywide commitment to democratic schooling.

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PHOTO: INSTITUTE FOR RESPONSIVE EDUCATION



5 Sorting, Ability Grouping, and Tracking

Research Evidence for
School Restructuring

"Tracking restricts access to knowledge for most students, particularly those in the lowest groups and tracks, and limited exposure to 'high-status' knowledge puts artificial limits on student achievement. Moreover, the success of alternative instructional strategies in heterogeneous groups suggests that tracking is not only harmful, but also unnecessary."

Although the sorting and grouping of students according to their "abilities" or "deficits" is common at all levels of education in schools nationwide, the widespread assumptions upon which it is based are simply not supported by the past several decades of research. By preventing equal access to knowledge, instructional grouping practices create significant barriers to the academic achievement of most students.

Our analysis of Boston's sorting, grouping, and placement practices leaves little doubt that students in Boston have vastly different educational experiences depending upon their placement in a particular classroom group, class, cluster, course, formal categorical program, or high school. By preventing equal access to knowledge, Boston's instructional grouping practices create significant barriers to the academic achievement of most students. They also stand in the way of creating cohesive school communities built upon shared commitments to the ideals of equity and social justice.

The prevalence of ability grouping and tracking in Boston suggests that Boston accepts these practices as sound and effective educational policy. In fact, however, although the sorting and grouping of students according to their "abilities" or "deficits" is common at all levels of education in schools nationwide, the widespread assumptions upon which it is based are simply not supported by the past several decades of research.¹ Moreover, this research has demonstrated that ability-grouping and tracking are an inefficient means of addressing individual differences and may have significant harmful effects.

Recent studies of student grouping document significant differences among ability groups in regard to curriculum, instruction, class climate, and teacher expectations — differences that most often favor the high groups and tracks. Tracking restricts access to knowledge for most students, particularly those in the lowest groups and tracks, and limited exposure to "high-status" knowledge puts artificial limits on student achievement. Moreover, the success of alternative instructional strategies in heterogeneous groups suggests that tracking is not only harmful, but also unnecessary.²

Assumptions About Homogeneous Grouping

Jeannie Oakes and John Goodlad have identified four widely held assumptions that support the practice of grouping students together according to their perceived ability. Thus, supporters of ability grouping and tracking tend to believe the following:

1. Students learn better and achieve more when they are grouped with other students of similar ability.
2. Low-ability students develop more positive self-concepts when they are not grouped with students of high-ability.
3. Group placement is an accurate and fair reflection of both achievement and native ability and is an appropriate basis for future learning.
4. It is easier for teachers to teach and manage groups of students of similar ability than those of mixed ability.

Research evidence, however, weighs heavily against these assumptions. In fact, virtually all — with the possible exception of the fourth — have been proved false. Based on an exhaustive review of the literature and her own in-depth observations in classrooms all over the country, Oakes comes to dramatic conclusions that dispute each of these assumptions.

Ability Grouping and Academic Achievement

First, research reveals that being isolated in homogeneous groups is not educationally beneficial to students. In fact, Oakes reports, "we have virtually mountains of research evidence indicating that homogeneous grouping does not consistently help anyone learn better."³ Students of average and especially of low achievement levels do less well when placed in average or low groups than they do in mixed groups, while students of high ability tend to achieve at similar rates regardless of whether they are placed in mixed- or similar-ability classes.⁴ While the "top track" often appears to provide advantages for students placed there, these students achieve at least as well in heterogeneous groups, provided they receive the same high quality educational experiences in mixed groups as they would in homogeneous high-track groups.⁵

For all students, the grouping is less critical than the quality of instruction. In other words, it is the differential distribution of benefits by ability group or track rather than the placement itself that makes the high track more desirable than the low track. Thus, in homogeneous high-track classes "the fact that students are tracked seems less important than that they have the other instructional advantages that seem to go along with classes that are highly able....When other, less able, students are offered similar advantages, they also seem to benefit."⁶

Students in low and average tracks derive few, if any, academic benefits from homogeneous ability grouping. To the contrary, tracking typically results in the most vulnerable students receiving the fewest educational advantages. While supporters of the practice often argue that grouping students by ability provides for more individualized instruction, this in fact rarely occurs. Indeed, "same-ability" groups often provide less individualization than mixed-ability groups because teachers assume students are more alike than they really are and tend not to individualize instruction further to respond to the inevitable differences that remain among students.

Ability grouping often creates only an illusion of sameness. In reality, the use of homogeneous grouping "simply masks the fact that instruction for any group of 20 to 35 people requires considerable variety in instructional strategies, tasks, materials, feedback, and guidance. It also requires multiple criteria for success and a variety of rewards."⁷ While organizing instruction to account for such diversity is not an easy undertaking, grouping by ability can create the impression that further attention to individual differences is not necessary. Teachers in any context must find ways to manage student diversity. As Goodlad notes, "The decision to track is essentially one of giving up on the problem of human variability in learning. It is a retreat rather than a strategy."⁸

Perhaps most significant is the finding that initial track assignment tends to freeze grouping patterns over time.⁹ The lack of movement from lower to higher tracks suggests that "tracking typically does not lead to adaptive instruction of low achievers. If it did, significant numbers of these students would work harder and move up to higher tracks."¹⁰ In fact, researchers also note that if track placement changes at all, movement tends to be downward.

Research reveals that being isolated in homogeneous groups is not educationally beneficial to students. Students of average and especially of low achievement levels do less well when placed in average or low groups than they do in mixed groups, while students of high ability tend to achieve at similar rates regardless of whether they are placed in mixed- or similar-ability classes. For all students, the grouping is less critical than the quality of instruction.

Rather than causing "low-ability" students to feel better about themselves, the sorting process seems to foster poor self-esteem — and all its attendant problems — in students placed in the lower levels. In this context, the grouping of low-achieving students together in one classroom "for their own good" can only be seen as "help that can hurt." It leads teachers and schools to ask much less of students than that of which they are capable, and more shamefully, it may cause students to demand much less of themselves.

Ability Grouping and Self-Esteem

The second assumption underlying ability grouping practices is that placement based on ability "protects" lower level students from the stigma, embarrassment, or failure they would face if they were grouped with higher achievers. This assumption also has been proved invalid. In fact, rather than causing "low-ability" students to feel better about themselves, the sorting process seems to foster poor self-esteem — and all its attendant problems — in students placed in the lower levels.

Identification with any low-status group may have far-reaching implications for students. Labeling students "low-ability" often puts in motion a self-fulfilling prophecy as students internalize this label and act it out. Students placed in lower tracks frequently experience lower academic and personal self-confidence, lower educational aspirations, more school misconduct, higher dropout rates, and higher delinquency rates. And because the studies that observed these correlations were carefully controlled, they suggest that these negative effects may be due to the placements themselves and not to the personal or socioeconomic characteristics of the students involved.¹¹

For students in low groups, negative self-concepts may be both cause and effect of the negative expectations of their teachers and other students. As Oakes explains, "Students experience lower self-esteem and expect less of themselves when schools publicly identify them as less able."¹² At the same time, teachers are often conditioned to expect less — both in terms of achievement and behavior — of these students, and they often alter their own teaching behaviors to match these lowered expectations. In this context, the grouping of low-achieving students together in one classroom "for their own good" can only be seen as "help that can hurt."¹³ It leads teachers and schools to ask much less of students than that of which they are capable, and more shamefully, it may cause students to demand much less of themselves.

Ability Grouping and the Misperception of Fixed Intelligence

The assumption that ability group placements are accurate, appropriate, and fair reflections of student achievement and ability is also refuted by research.¹⁴ Such placements are typically based upon students' standardized test scores and teacher and counselor recommendations. Yet tests may be unreliable and are often biased and, in turn, teacher and counselor recommendations are frequently influenced by test results and cultural factors.

Basing group or track placement decisions primarily on standardized test scores is educationally irresponsible. Although standardized tests are often promoted as an "objective" means to assess student achievement and ability, in reality their results are often inaccurate, inconsistent, and biased against minority, female, and low-income students. Moreover, "the ability of standardized tests to accurately report students' knowledge, abilities, or skills is limited by the assumptions that these attributes can be isolated, sorted to fit on a linear scale, and reported in the form of a single score."¹⁵

Intelligence, however, is a multifaceted phenomenon that cannot be so simply measured. Indeed, as researchers point out:

Modern theories emphasize the complexity of human intelligence. Researchers have observed that knowledge, learning, and thinking have multiple facets and that a high level of development in one area does not necessarily indicate a high level of development in others. Unitary test scores and linear scaling of scores ignore the true complexity of human intelligence and thus provide a deceptive picture of individual achievement, ability, or skills. This fundamental problem underlies all standardized tests in education.¹⁶

A child's test scores and current level of achievement are not necessarily valid predictors of future performance. Not only are such indicators inadequate to determine the *potential* of a child, but as recent studies in cognitive psychology suggest:

Academic ability is not unchangeable but developmental — growing throughout childhood. As children interact with their environment, they acquire cognitive abilities. Especially important are studies showing that even students who begin school with less developed abilities can learn. Other work suggests that what we conventionally think of as "low" ability may not be as limiting as we generally think. The achievement gaps we observe among students of differing abilities are exacerbated by the failure of classrooms to provide all students with the time, opportunities, and resources they need to learn.¹⁷

The potential of formal education to foster the development of observation, thinking, reasoning, and other cognitive skills in all young people makes the waste of intellectual capacity caused by "ability" grouping all the more tragic. For while schools can certainly change children's lives for the better, it is also true that the instructional and organizational practices schools choose can inhibit academic achievement and cognitive development. Indeed, research has demonstrated that when low-track students are provided with educational experiences and expectations more typical of high-track classes the students perform in ways more typical of high-track students, suggesting that student achievement might be a function more of school practices than of the characteristics of students themselves.¹⁸

Ability Grouping to Facilitate Instruction

Finally, while many teachers would argue that homogeneous groups are easier to teach, the argument is circular because the curriculum and instruction of most schools is designed and organized for homogeneous groups. So far as teachers are inexperienced in designing learning activities for mixed groups or unwilling to alter their instructional strategies, the assumption may hold. Grouping and tracking by "ability," therefore, may be just a symptom of a more profound problem — inadequate instruction. As one observer has commented:

A child's test scores and current level of achievement are not necessarily valid predictors of future performance. Not only are such indicators inadequate to determine the *potential* of a child, but as recent studies in cognitive psychology suggest: "Academic ability is not unchangeable but developmental — growing throughout childhood. As children interact with their environment, they acquire cognitive abilities."

The real problem is that the instructional procedures used in schools are not very successful with many children, especially those who do not learn quickly and easily. And what our grouping arrangements have done is to help mask this real problem by...eliminating the need to deal with the instructional issues more substantively....In the absence of sound and productive instructional procedures, creating and placing children in ever-lower ability groups is to permit ourselves, in the short run, an easy out.¹⁹

As Oakes notes, instruction can be organized not only to make heterogeneous groups manageable but even to "make heterogeneity in a classroom a positive instructional resource."²⁰ This report will discuss such alternative instructional strategies in subsequent chapters.

Most importantly, while tracking and ability grouping may seem to be more convenient for teachers as curriculum and instruction are currently designed, they are certainly not easier for students. As Oakes asserts, "the assumption that tracking makes teaching easier pales in importance when held up against the abundant evidence of the general ineffectiveness of tracking and the disproportionate harm it works on poor and minority students."²¹ Indeed, the examples of the costs of tracking and ability grouping in Boston — costs in terms of classroom climate and student motivation and self-esteem — suggest that these practices do not really make life much easier for teachers either.

Ability Grouping and the Differential Quality of School Life

The evidence confirms that sorting and grouping students on the basis of their ability results in widely varying curricula and markedly unequal educational experiences for students placed in different groups or tracks. Curriculum, instructional methods, teacher expectations, class climate, and overall quality of education vary markedly among the different tracks, with the differences consistently favoring the higher tracks.

At the same time that assumptions underlying the reliance on tracking and ability grouping have been proved false, the practices themselves have been shown to have significant negative consequences for students, particularly those placed in the low groups and tracks. The evidence confirms that sorting and grouping students on the basis of their ability results in widely varying curricula and markedly unequal educational experiences for students placed in different groups or tracks. In his multi-year project "A Study of Schooling," John Goodlad and a research team from the University of California at Los Angeles (UCLA) conducted extensive observations of high-, average-, and low-track secondary school classes across the country. The study concluded that the stated goals, curriculum, instructional methods, teacher expectations, class climate, and overall quality of education varied markedly among the different tracks, with the differences consistently favoring the higher tracks.²²

Differences in Curriculum

A Study of Schooling found that students in high-track classes were exposed to more of the "high-status" knowledge that would eventually be required of them in more advanced courses and in college, while students in low-track classes were effectively denied access to such knowledge. The differences among tracks suggest that only the best and the brightest students are thought to need critical thinking habits and high-order skills.

For example:

- Students in high-track English classes were much more likely than their peers in low-track classes to read recognized works of modern and classical literature. High-track classes frequently studied literary genres, analyzed literary conventions, performed extensive expository writing and library research, and were expected to master the vocabulary required for the Scholastic Achievement Test (SAT).
- Low-track English classes were more likely to be oriented toward functional literacy skills — basic reading and listening, language mechanics, and simple narrative writing. Their materials most often consisted of workbooks, "kits," and young adult fiction at a low level of difficulty.
- Similarly, while students in high-track mathematics classes were more likely to study mathematical ideas, concepts, theoretical models, and computational procedures, those in low-track classes more often learned only basic computational skills and practical or consumer math.

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Differences in Instruction

The UCLA study also found significant differences in both the quantity and the quality of instruction at various track levels. For example:

- High-track classes spent more time on instruction than low-track classes; in low-track classes, a greater amount of time was consumed by socializing, class routines, and disciplinary measures. Students in high-track classes were also expected to spend more time on homework than their lower-track peers.
- Compared with low-track classes, high-track classes typically moved at a much faster pace and devoted more time to "high-level cognitive processes" such as critical thinking, problem-solving, evaluating and synthesizing information, and drawing conclusions.
- Low-track classes moved at a slower pace and more often concentrated upon drill, rote learning tasks, worksheets, and the application of basic skills.

Teacher Behaviors and Attitudes

The UCLA study found that teachers of high-track classes tended to have much higher expectations — in terms of both academic achievement and behavior — for their students than did teachers of low-track classes. For example:

- Teachers of high-track classes were more likely to encourage "independent thinking behaviors" such as critical thinking, active participation, independent work, self-direction, and creativity.
- Low-track teachers more frequently sought "conforming behaviors" and passive compliance.
- Students in high-track classes viewed their teachers as more caring, concerned, and enthusiastic than students in lower-level classes who saw their teachers as less encouraging and more punitive.

Class Climate

Researchers also found great variability in classroom climate and social relationships between high-track and low-track classes. Specifically:

- Peer relationships in high-track classes were much more positive than those in low-track classes. In general, researchers noted less arguing, yelling, fighting, and teasing and more cooperation, support, and trust in the high-track classes.
- In marked contrast to the high-track classes, the low-track classes were more often characterized by a climate of competition, alienation, defeat, and hostility. Students in low-track classes were more negative or apathetic toward school and indicated more often that they did not care if they failed.

Expectations and Aspirations

Finally, A Study of Schooling found that the differences in learning conditions set the stage for differences in students' own perceptions of what their futures might hold. In particular:

- High-track students had much higher educational aspirations and levels of both academic and general self-esteem than middle- or low-track students.
- Low-track students expressed the lowest self-concepts and expectations for their future life options.

Goodlad's study thus discovered marked inequities in the educational experiences of students in different tracks with respect to access to knowledge, effective instructional strategies, and positive learning environments. As Goodlad summarizes:

In almost every category we found consistent, significant differences among the classes of the three track levels. And these differences favored the upper tracks — that is, practices supported in the literature as most advantageous were perceived most frequently in the upper tracks and less frequently in the lower; and practices associated negatively with student satisfaction and achievement were perceived most and least frequently in the lower and upper tracks, respectively.²³

Institutionalizing the Gap Between the Haves and Have-Nots

Differences in educational experiences among the various levels of a tracked educational system serve to widen initial differences in student performance, significantly increasing the disadvantage of students placed in the low groups. Students in low tracks are rarely offered access to the knowledge and skills that are essential for mobility among levels. Consequently, such students may become locked into their low-track placement. Indeed, initial low-track placement may permanently close off options for future learning, and by extension, future life opportunities.

Far from being "the great equalizer" envisioned by Horace Mann, with the potential to redress the great inequities of the larger society, the practices of ability grouping and tracking merely reinforce and institutionalize these inequities and put artificial limits on the learning of the majority of their students. Instead of writing off students, often on the basis of early judgments about their ability and educability, schools must strive to create educational environments that maximize the learning of all students. Rather than reinforcing and exaggerating the initial differences that exist among students, schools must attempt to minimize and compensate for these differences and to close the gap between the educational haves and have-nots.

Differences in educational experiences among the various levels of a tracked educational system serve to widen initial differences in student performance, significantly increasing the disadvantage of students placed in the low groups. Consequently, such students may become locked into their low-track placement. Indeed, initial low-track placement may permanently close off options for future learning, and by extension, future life opportunities.

A Growing Consensus Against Tracking

In light of the overwhelming research evidence against tracking, a number of educational policy groups, professional organizations, and advocates for students at the national, state, and local levels are beginning to sound the alarm about the harmful effects of tracking and to call on schools to eliminate the grouping of students by "ability" or "merit." For example:

From the Council for Basic Education:

No single widespread practice in American schools is as pernicious, is as counter to the philosophy of the Council for Basic Education, as the systematic and rigid grouping of students into separate educational "tracks" according to supposed aptitude. Poor and minority students pay an especially high price for they are the ones most often herded into less challenging, less fulfilling, and less empowering tracks. Unless we demolish the tracks themselves other reforms in our schools will be derailed.²⁴

From the Carnegie Council on Adolescent Development:

Tracking is one of the most divisive and damaging school practices in existence....Time and again, young people placed in lower academic tracks or classes, often during the middle grades, are locked into dull, repetitive instructional programs leading at best to minimum competencies. The psychic numbing these youth experience from a "dumbed-down" curriculum contrasts sharply with the exciting opportunities for learning and critical thinking that students in the higher tracks or classes may experience.²⁵

From the Children's Defense Fund:

Despite its widespread use, tracking lacks consistent evidence to support it as a beneficial practice. At a time when youngsters are establishing their identity, it can be especially detrimental....Furthermore, tracking at the middle grades level tends to determine what a student's options will be for the rest of his or her life. Teaching in the lower tracks often amounts to a curriculum that is inadequate for admission to college.²⁶

From the New World Foundation:

Meritocracy rationalizes school failure by attributing it to individual deficiencies, rather than to schools which do not serve children well. Today, as in the past, school resources, expectations, and services are highly unequal, both absolutely and relative to student needs. Competitive standards and methods of achievement compound social and educational advantages and disadvantages, and force unfair trade-offs between different kinds of need. Our school system has thus reproduced the prevailing pattern of social stratification, not transcended it.²⁷

From the National Coalition of Advocates for Students:

Many schools now use elaborate sorting mechanisms that subvert the goal of educating students to their fullest potential. The result is that many children suffer, academically and socially. The teaching approach, curriculum, and allocation of resources in such schools are based on limited, rather than unlimited notions of what students can achieve....Schools "sort out" a significant number of students, subject them to the most minimal expectations, and then tolerate low levels of achievement.²⁸

From the Committee on Policy for Racial Justice:

Because research findings consistently indicate that inflexible track placements and rigid ability grouping segregate, stigmatize, and deny those in the bottom tracks the same access to quality education those in the upper tracks receive, we believe that these practices should be ended. It is well known that black and other low-income minority students are overrepresented in the lower-ability tracks in our nation's school systems, yet it is frequently overlooked that the differences in the kind of instruction across tracks make it increasingly difficult for these students ever to climb up the academic hierarchy. In this way, low expectations and mindless bureaucracy crush the potential of thousands of black youth each year and limit their future opportunities.²⁹

It is well known that black and other low-income minority students are overrepresented in the lower-ability tracks in our nation's school systems, yet it is frequently overlooked that the differences in the kind of instruction across tracks make it increasingly difficult for these students ever to climb up the academic hierarchy.

From the National Commission on Secondary Schooling for Hispanics:

John I. Goodlad in *A Place Called School* recommends the elimination of tracking at all levels of schooling. We concur, and we agree with another recent report that "the education needed for the workplace does not differ in its essentials from that needed for college or advanced training"....The National Commission on Secondary Schooling for Hispanics favors elimination of tracking.... Excellence must not be an absolute standard, but *the opportunity to strive for excellence must be available to all.*³⁰

From the Education Commission of the States:

Student assignment and grouping patterns tend to lock [disadvantaged students] into [inadequate learning] environments, confining them to their peer group and depriving them of interaction with a diversity of students and exposure to other views. That is, much of what constitutes disadvantage in the student's everyday environment gets reinforced in the school's social environment....Without a change in how curriculum and the school day are organized, accompanied by changes in instructional strategies and student grouping arrangements, it is unlikely that [other] changes will increase student achievement, especially for those who need it most.³¹

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From the Massachusetts Department of Education:

In reviewing the research, it is clear that the historic assumptions about ability grouping simply do not hold true. The widespread use of ability grouping is in stark opposition to increasing concerns that students are receiving differentiated educations based upon race, socioeconomic background, language, gender, and special education status. Instead of creating school structures that minimize and compensate for initial disadvantages in learning, ability grouping unwittingly increases these disadvantages....It is recommended that schools eliminate the use of widespread ability grouping, and implement alternatives.³²

From the National Association of State Boards of Education:

Disadvantaged students progress better when they are not trapped with other low achievers but are totally integrated into the life of the school and given the same high expectations. There is evidence that current sorting and tracking practices of many schools have extremely negative effects on low achieving youngsters and that high-achieving students are not hindered by heterogeneous groupings.³³

From the National Education Association:

The National Education Association believes the use of discriminatory academic tracking based on socioeconomic status, race, or sex must be eliminated in all public school settings. The Association urges its affiliates to oppose these practices.³⁴

From the Quality Education for Minorities Project:

[We recommend that schools] eliminate ability grouping and age grading in the elementary grades. The decision about how to track a new student rarely takes more than a week; the damage lasts a lifetime. School boards should require principals and teachers to address differential rates of preparation for learning by such techniques as flexible pacing and cooperative learning, not by segregating students according to the artificial criteria of pre-conceived expectations and often-suspect tests...On the larger scale, we strongly support the development of a core academic curriculum for middle and senior high school students that prepares all students for college or a meaningful career.³⁵

From National Middle Schools Association:

Whereas, young adolescence is a period of dramatic developmental diversity deserving responsive grouping practices, and whereas, common tracking and rigid ability grouping do not accommodate this diversity, and whereas, research has demonstrated that such practices have either negative, or at best, no impact on either student achievement or self-concept.

THEREFORE, BE IT RESOLVED THAT NMSA URGES SCHOOL PERSONNEL TO IMPLEMENT FLEXIBLE GROUPING PRACTICES WHICH PLACE STUDENT NEEDS ABOVE ORGANIZATIONAL AND INSTRUCTIONAL CONVENIENCE.³⁶

The call for reform has been sounded. It is the responsibility of all of Boston's educational decision-makers — including parents, teachers, school administrators, and the School Committee — to respond.

The call for reform has been sounded. It is the responsibility of all of Boston's educational decision-makers — including parents, teachers, school administrators, and the School Committee — to respond. All actors must now work to replace outmoded and ineffective practices of tracking and ability grouping with alternatives that are more accountable both to what research identifies as effective practice and to the students whose futures are limited by current practice.

PHOTO: TED FITZGERALD, THE BOSTON HERALD



6

Making Diversity Work

Challenges and
Alternatives to Tracking

“Alternative instructional and curricular strategies share a fundamental rejection of the traditional remedial approach to the education of vulnerable students. They emphasize that schools can and do make a difference in student learning and that schooling can be reconceptualized and restructured to provide all children with challenging educational experiences in mixed-ability groups.”

All Boston students have the right to a free, appropriate, and effective education. Indeed, the Massachusetts Constitution, notes that the "wisdom and knowledge, as well as virtue" of the state's citizens, which are necessary for "the preservation of their rights and liberties," depend upon "spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of people."¹ On such a premise rests a claim to equal access to knowledge in Massachusetts schools.

This claim is also rooted in federal law. In an examination of landmark judicial decisions bearing on the meaning of "equal protection" where fundamental rights are concerned, David L. Kirp asserts that public education bears so directly on the nature of society that it may be considered one such "fundamental right." According to Kirp:

The state owes a vastly greater responsibility to its school children than it presently accepts. It is constitutionally obliged, not merely to open its doors to all comers, but to provide *effective* equality to all....The right to an equal educational opportunity merits special judicial solicitude because education shares with criminal process and suffrage the attributes of a fundamental right. Education bears directly on the individual's effective participation in the political process; it is essential to the maintenance of the society's values; it is crucial for the individual's satisfactory life prospects.²

This report has argued that current instructional grouping practices in Boston harm many of the district's students. As we have seen, the practices of sorting and tracking students by so-called "ability" exacerbate rather than eliminate initial differences among students and unnecessarily limit the academic and personal development of perhaps a majority of them. In this section, we argue further that these practices may infringe on students' claims to equal educational opportunity, and that alternative practices show such promise that rigid ability grouping and tracking are rendered not only ineffective but unnecessary.

Legal Challenges to Ability Grouping and Tracking

If education is a "fundamental right," then "equal educational opportunity" must come to mean more than merely "equal access;" it must also entail equitable treatment. As Kirp points out, equal educational opportunity does not mean that all children have a "constitutional right" to perform at a certain achievement level; rather:

The school is obliged to exert its energies in overcoming initial differences that stem from variations in background in home life (or lack of home life) and community....When discussing other fundamental rights, like criminal process and suffrage, the court has recognized that the state does not satisfy its constitutional responsibility if it merely takes people as it finds them, setting equal standards of access. The state must assure each citizen effective utilization of the fundamental right, regardless of the disparity of effort that must be made to assure that utilization.³

If education is a "fundamental right," then "equal educational opportunity" must come to mean more than merely "equal access;" it must also entail equitable treatment.

In the 1960s and 1970s, courts repeatedly struck down tracking systems in districts that placed minority students in low tracks in disproportionate numbers, on the grounds that such systems were inherently discriminatory. Referring to Title VI of the Civil Rights Act of 1964, courts ruled that "schools have a general obligation to assure that students are not 'normed' in a way that results in students of some races receiving a less valuable education."⁴ Title VI bans racial discrimination by private and public institutions receiving federal funding; as currently interpreted, it bans all intentional discrimination as well as practices that have a disproportionate impact on minorities, unless the defendant can prove that the practice is necessary.

Given the current state of research on ability grouping and tracking, arguments for their educational necessity are likely to be discredited. As John Goodlad has speculated:

Since tracking appears to block the poor and disadvantaged from access to knowledge which might serve to advantage them, pressure to abolish it undoubtedly will find its way to the judicial branch of government. It is conceivable to envision a day when tracking will be prohibited, as is now the case in Sweden.⁵

Moreover, although the most common grounds on which tracking has been legally challenged has been that of its disparate harmful impact on poor and minority students, there is a growing consensus that it may be challenged on other grounds as well. Indeed, although a practice that results in disproportionate harm to the poor and to minorities may be particularly reprehensible, any practice that provides differential access to an effective education to students on the basis of their "difference" — whether defined by race, ethnicity, socioeconomic status, gender, or "ability level" — constitutes a denial of equal educational opportunity and is unjust and antithetical to the principles of a democratic society. A vision of democratic schooling requires schools to go beyond a concern with "disproportionate harm," to assert that tracking is damaging to all students, and to call for its elimination.

Although a practice that results in disproportionate harm to the poor and to minorities may be particularly reprehensible, any practice that provides differential access to an effective education to students on the basis of their "difference" — whether defined by race, ethnicity, socioeconomic status, gender, or "ability level" — constitutes a denial of equal educational opportunity and is unjust and antithetical to the principles of a democratic society.

The Challenges of Alternatives

The existence of alternatives to ability grouping and tracking as instructional strategies for heterogeneous groups of students constitutes a persuasive argument for eliminating such practices and replacing them with more effective and democratic models of instructional grouping. Indeed, it has been argued that there exists a legally enforceable obligation for school officials to utilize such new knowledge culled from research and demonstration projects.

Recently, legal scholars such as Edgar Cahn have argued for the recognition of "new rights" that have their source, not in the Constitution nor in statutes, but "elsewhere: in new knowledge about what is and what is not possible, in the new remedies such knowledge makes possible, and in the duty of due care and the standard of the reasonable person found in common law doctrine."⁶ Cahn and others argue that successful demonstration projects and volumes of research of the past several decades have increased knowledge about effective and ineffective educational practice to the extent that:

Just as doctors must exercise due care to avoid doing harm to their patients, state and local educational agencies have an obligation to be aware of and to use relevant knowledge that would reduce the risk of educational injury to their students. Given significant evidence that ability grouping and tracking are injurious to students, and in the absence of evidence of their efficacy in promoting student learning, the doctrine of due care would oblige the elimination of these practices.

it may be possible to establish a new judicially enforceable requirement that officials and others stay abreast of and make use of new knowledge in fulfilling their duties and in discharging public functions. Where such projects (or research) have identified consistent failure, then tenacious adherence to foredoomed methods may become legally unjustifiable if better alternatives are available.⁷

Just as doctors must exercise due care to avoid doing harm to their patients, state and local educational agencies have an obligation to be aware of and to use relevant knowledge that would reduce the risk of educational injury to their students. Given significant evidence that ability grouping and tracking are injurious to students, and in the absence of evidence of their efficacy in promoting student learning, the doctrine of due care would oblige the elimination of these practices. Likewise, schools may have a duty to seek out and experiment with such practices as critical thinking instruction, cooperative learning, multiage grouping, and peer and cross-age tutoring, which have proved to be instructionally effective with diverse groups of students.

In *Hobson v. Hansen*, the Washington, DC District Court ordered the dismantling of the existing tracking system in the city's school district on the grounds that it denied equal educational opportunity to disadvantaged minority students. As Judge Wright concluded in his opinion in the case:

It would be far better indeed for these great social and political problems to be resolved in the political arena by other branches of government. But these are social and political problems which seem at times to defy such resolution. In such situations, under our system, the judiciary must bear a hand and accept its responsibility to assist in the solution where constitutional rights hang in the balance.⁸

The legal system is neither the only nor the most desirable way by which to end the harmful practice of tracking. Policy-makers and school staff themselves can promote alternative approaches of dealing with student diversity in the classroom. These alternatives illustrate that educators can act to de-track public schools and expand equal educational opportunity through state-of-the-art practice.

De-Tracking and Schoolwide Restructuring

Implicit in the practice of grouping students according to "ability" and providing them with widely varying educational experiences is the belief that these differences predetermine how much and how well students will learn. Such a conviction, as the Council for Basic Education points out, "is profoundly disturbing, because it implies that schooling makes no difference."⁹ It denies the potential power of schools to overcome initial differences so that all students may benefit from the best education schools have to offer. Moreover, as research has confirmed, segregating students for instructional purposes does not merely allow ability differences to happen; it exacerbates them by providing differential access to knowledge and effective instruction.

Such a response is not only unfair, it is unnecessary. In the past decade, knowledge of alternative methods of managing student diversity has evolved to the point that educators no longer must resort to placing students in categories that may limit their learning. Given solid evidence that tracking and ability grouping can cause serious academic and emotional harm to students, educators and policy-makers must implement new models of instructional grouping in Boston Public Schools — models based upon the assumption that schools can and do make a difference in student learning.

It is not enough simply to cluster students of different abilities together. De-tracking cannot occur without changing the ways schools organize what they teach, how they teach it, and how they assess how well students have learned what we want them to know. Along with new models of instructional grouping, schools must introduce practices that provide a rich, high-content curriculum, instruction based on high expectations for all students, and a multifaceted assessment of student progress that motivates students to make improvement over their "last best effort." For example, Jeannie Oakes and John Goodlad identify the following key elements of a de-tracked school:

- A curriculum "rich with meaning," organized around central themes or concepts rather than disconnected topics and skills, so that students of all ability levels may participate regardless of skill differences. Such a curriculum should be complex and challenging, requiring diverse tasks and allowing for multiple routes to success; it should allow students access to knowledge valued in the society and provide opportunities for students to apply this knowledge to their lives.
- An interactive classroom organization emphasizing active rather than passive learning and generally relying more on cooperative learning in small groups, than on competitive or individualistic learning activities.
- Assessment of student progress that supports learning by basing evaluation on what students have learned — on their personal improvement and development — and not on how they compare to others. Assessment should avoid public comparisons of student ability and displays of grades and test scores.

The success of mixed-ability grouping depends upon changes that create opportunities for success for students of all levels of achievement. Alternative educational strategies developed, implemented, and evaluated over the past decade are designed precisely to achieve this goal and to make rigid ability grouping unnecessary. Such alternatives include: a curriculum organized around themes and concepts and emphasizing critical thinking behaviors over basic, low-level skills; accelerated learning; cooperative learning; cross-age tutoring; peer tutoring; and multiage classrooms. While probably only a small minority of schools across the country employ these practices — some researchers, for example, estimate that less than 5% of all teachers have introduced cooperative learning into their classrooms¹⁰ — these strategies are slowly gaining exposure and acceptance. A critical role of policy in Boston should be to encourage and facilitate the incorporation of such state-of-the-art practices into the repertoire of the city's teachers within a context of restructured schools.

De-tracking cannot occur without changing the ways schools organize what they teach, how they teach it, and how they assess how well students have learned what we want them to know. Along with new models of instructional grouping, schools must introduce practices that provide a rich, high-content curriculum, instruction based on high expectations for all students, and a multifaceted assessment of student progress that motivates students to make improvement over their "last best effort."

Critical Thinking Skills for All Students: Redefining "The Basics"

As our review of the research and our interviews with students confirm, when students are grouped by "ability," instruction for those placed in low groups and tracks emphasizes workbooks, drill, recitation, seatwork, and teacher lecturing and minimizes opportunities for more thought-provoking and stimulating learning activities. Instruction in high-level groups and tracks, on the other hand, more frequently exposes students to critical thinking, problem-solving, decision-making, and inventive or creative thinking — higher level cognitive processes which, according to some researchers, "are most often predictive of success in school and [may]...constitute intelligence itself."¹¹ Tracking makes it highly unlikely that students placed in low tracks will ever have exposure to such "high status" skills, and this may have disastrous implications for their educational futures and, indeed, for their life chances.

In many school systems, however, the emphasis on low-order skills is not restricted to the low tracks. Particularly in urban districts like Boston with large numbers of vulnerable students, curricular goals tend to focus on acquisition of these so-called "basic skills" for all students.¹² This is so because it is widely — although erroneously — believed that students cannot be exposed to higher order skills until they have achieved mastery of basic skills.

The traditional organization of curriculum — skills before knowledge, lower-order skills before higher-order skills — makes heterogeneous groupings difficult, if not impossible, for most teachers. Such a hierarchical organization sets up an instructional management problem for teachers of diverse groups of students. As long as curriculum is organized according to a presumed hierarchy of skills, the "faster" students will outpace the "slower" students in mastering "the basics." In turn, teachers will be torn between the need to move quickly so that "faster" students are not bored and the need to move more slowly to allow the "slower" students to catch up. For this reason an emphasis on non-hierarchically ordered critical thinking skills is crucial to the success of mixed-ability classes. Indeed, Susan Rosenholtz and Elizabeth Cohen have stressed that mixed-ability classes will be most successful when they minimize "the kind of right-answer thinking and rote skills so characteristic of back-to-basics classrooms," and maximize learning activities that include "discussion, defending one's point of view, reasoning, logic, experimentation, model building, role playing, and conceptual learning."¹³

As long as curriculum is organized according to a presumed hierarchy of skills, the "faster" students will outpace the "slower" students in mastering "the basics." Mixed-ability classes will be most successful when they minimize "the kind of right-answer thinking and rote skills so characteristic of back-to-basics classrooms," and maximize learning activities that include "discussion, defending one's point of view, reasoning, logic, experimentation, model building, role playing, and conceptual learning."

Unfounded Assumptions About "Basic" Skills

Researchers and practitioners are increasingly concluding that an overemphasis on basic skills — and particularly the practice of insisting that mastery of these skills be a precondition of exposure to higher order skills — is based on several false assumptions. First, the belief that basic skills are the foundation for the development of higher-order skills is unfounded. As the National Assessment of Educational Progress concluded in 1982:

Lower-order so-called basic skills are not necessarily the 'building blocks' essential to acquiring higher-order skills such as problem solving, analyzing, synthesizing... Learning is not the linear process as popularly perceived by the public.¹⁴

Indeed, even in subjects such as mathematics, in which the organization of skills is assumed to follow a logical hierarchy, there may be no natural instructional progression: "You can learn to multiply without knowing how to add," asserts the author of a recent *Education Week* commentary. "We teach the various mathematics operations as if addition has to come first but it ain't so." He continues:

Not only the general public but also many people in education and test publishing believe that there are 'basic skills,' that they are measured by the standardized achievement tests currently on the market, and that they must be mastered before children can proceed to higher-order skills. This view is nonsense.¹⁵

Moreover, instruction in high-order thinking skills, rather than being dependent upon a prior foundation of basic skills, may actually help students acquire and master basic skills. Indeed, results of Stanley Pogrow's Higher Order Thinking Skills (HOTS) program suggest that exposure to critical thinking and problem-solving activities, rather than exclusively to the low-order skills stressed in traditional compensatory approaches, allows Chapter 1 students to develop thinking skills which later translate into improved understanding and retention of basic skills.

By tracking "low ability" students into low-level courses and providing them with a less challenging education, schools feel that they are serving their students' needs. Yet schools that give students only low-level instruction deny them access to the knowledge and skills they need to engage in higher-level coursework and, indeed, to transform their lives. As one advocate for an enriched curriculum puts it:

There is something dreadfully wrong with a definition of basic skills that does not include the critical literacy and problem-solving skills that students need for tomorrow's jobs. Thus, I would seriously question the success of school improvement efforts that move students at risk from the 30th percentile to the 40th, or to some other low level of achievement that leaves them lacking in proficiencies for the twenty-first century.... To put it simply, low-achieving students are unlikely to become productive citizens if they are never given the same opportunities to participate that high-achieving students are.¹⁶

A redefinition of "basic skills" to include a wider range of thinking skills is thus an essential component of restructuring schools to allow all students access to high status knowledge.¹⁷

The belief that basic skills are the foundation for the development of higher-order skills is unfounded. Instruction in high-order thinking skills, rather than being dependent upon a prior foundation of basic skills, may actually help students acquire and master basic skills.

**THE HIGHER ORDER THINKING SKILLS
(HOTS) PROJECT**

The Higher Order Thinking Skills (HOTS) project was initiated four years ago by Dr. Stanley Pogrow and colleagues at the University of Arizona, as an alternative to the traditional drill-and-repetition approach that characterizes the instruction of Chapter 1 students. The program grew out of Pogrow's conviction that the fundamental learning problem of such students is not a factual knowledge deficit — the assumption undergirding many compensatory education efforts — but “that they do not understand ‘understanding.’”¹⁸ “They view each piece of information as a discrete entity, applying it only to the context in which it was learned,” maintains Pogrow. “Recalling facts is probably the only learning experience that the students have had, and they literally believe that this is what learning is.”¹⁹ Accustomed to looking for the one right answer to a problem, most of these students never learn how to deal with ambiguity and uncertainty. They do not know how to work with ideas, analyze them, discuss them, and apply them.

The HOTS program issues a fundamental challenge to the kind of remedial fact-teaching which reinforces the belief that learning means acquiring discrete pieces of information and regurgitating “correct” answers. HOTS replaces all drill, practice, and content instruction with general thinking activities designed to transfer to gains in basic skills.

The HOTS program combines special teaching and curricular techniques with the use of Apple II computers to challenge students with demanding, stimulating, and motivational activities several years’ above their level. Through the techniques of socratic dialogue, peer tutoring, and self-monitoring based on computer feedback, the HOTS curriculum seeks to develop the fundamental thinking skills underlying all learning and problem solving. These skills include:

- Metacognition — consciously applying strategies such as prediction and hypothesis to solve problems;
- Inference — deducing information from context;
- Decontextualization — generalizing information from one context to another and making associations among related concepts in different contexts; and
- Synthesis — combining and synthesizing information from various sources.

The operating principle underlying the HOTS curriculum is that experience in critical thinking can help students master basic skills. Pogrow describes the program as a "gifted approach to the at-risk learner."²⁰ Indeed, in one school using the curriculum, 36% of the Chapter 1 students made the school honor roll; in another school, 10% of the Chapter 1 students were rediagnosed as "gifted" after a year in HOTS. Chapter 1 students in the HOTS program average significantly greater gains on standardized reading and math tests than national norms, and some HOTS sites have achieved average gains of over thirty percentile points in reading and/or math in the first year. As Pogrow explains:

Once students learn how to work with ideas, they engage in the basic linking activities that promote long term memory.... This breaks the cycle of remediation, and converts compensatory efforts into a truly supplemental activity.... Instead of dummifying up the curriculum, we should be spending more time figuring out how to make parts of it more sophisticated and interesting.²¹

While Pogrow does not argue for the elimination of all drill, rote learning, and direct content instruction, he argues that these processes can not help students acquire and develop necessary problem solving skills. His findings suggest that the emphasis on basic skills should be reduced to allow for a better balance of thinking and rote learning activities.²²

The success of HOTS suggests that a highly sophisticated "thinking skills" program can improve learning for all children. Indeed, although the program was originally designed for educationally disadvantaged students in grades four through six, it has proved successful for both learning disabled and gifted classes. With the support of national foundations, Pogrow is currently adapting HOTS for the middle grades.²³

Accelerated Learning: A Whole-School Alternative to Remediation

The accelerated approach runs counter to the traditional approach of compensatory education, which begins by labeling students as "slow" or "deficient," and then proceeds to provide them with a less demanding and effective instructional program. Instead, an accelerated school stresses high expectations and high status for all students and establishes timelines by which school staff will ensure that student learning is on grade level. Instruction is fast-paced and seeks to engage students in active learning.

Developed by Henry Levin of Stanford University's School of Education, "accelerated learning" is based on the premise that the methods traditionally used to advance the learning of gifted and talented students should be even more helpful for educationally disadvantaged students. The accelerated approach thus runs counter to the traditional approach of compensatory education, which begins by labeling students as "slow" or "deficient," and then proceeds to provide them with a less demanding and effective instructional program. The low educational expectations held for these students, the slow instructional pace provided them, the almost exclusive emphasis on drill and practice in their classes, and the lack of interesting and challenging applications in their curriculum virtually ensure that these students will only fall further and further behind their more advanced peers. According to Levin, "The combination of low status and low expectations is tantamount to treating such students as discards who are marginal to the mainstream educational agenda. Thus the [remedial] model creates the unhealthiest of all possible conditions under which to expect significant educational progress."²⁴

Levin's accelerated model, on the other hand, seeks to draw upon students' strengths rather than emphasize their weaknesses. An accelerated school stresses high expectations and high status for all students and establishes timelines by which school staff will ensure that student learning is on grade level. The curriculum of such a school emphasizes analysis, problem-solving, and interesting applications of knowledge that are related to the daily lives and experiences of students. Instruction is fast-paced and seeks to engage students in active learning. In addition, an accelerated school incorporates into the education of vulnerable students such promising instructional practices as interdisciplinary learning, cooperative learning, and peer tutoring, and involves parents and the larger community in the school.

Most importantly, an accelerated school functions "as an entirety rather than as a set of discrete programs and practices....The organizational approach serves to weave together a set of harmonious practices that will reinforce each other towards a common goal."²⁵ Accelerated learning is thus not merely an add-on, "band-aid" approach to schooling. It requires the restructuring of the entire school to eliminate the sorting out of a "gifted" minority of students for special treatment and to extend such treatment to every single student in the school.²⁶

Cooperative Learning: Teaching for Diverse Students

Particularly promising for heterogeneous classes are the array of instructional techniques referred to by the term "cooperative learning." While many traditional classrooms rely on a combination of teacher-led, whole-class instruction and independent seat work, cooperative learning builds upon the social instincts of children and adolescents and seeks to supplement or replace independent seat work with activities for small, mixed-ability groups.

Research indicates that these approaches may have many advantages over traditional instructional models, and may have especially important benefits for African-American and Hispanic students.²⁷ In addition, documented cognitive and affective benefits include the following:

- Higher achievement for all students, but especially for the most vulnerable;
- Greater use of higher-level reasoning;
- More on-task behavior and increased motivation and persistence in completing a task;
- Greater peer interaction, teamwork, and development of collaborative skills;
- Better attitudes toward school, peers, and teachers;
- Higher personal and academic self-esteem;
- More positive relationships among students of various races or ethnicities and between handicapped students and their nonhandicapped peers;
- Reduction of importance of intergroup distinctions, less stereotyping, and more complex perceptions of members of other groups.²⁸

Cooperative learning is not a panacea, however; while its success merits greater attention, it must be applied thoughtfully and in different ways at different grade levels. Good and Brophy, for example, report that cooperative learning methods have been used most successfully in math, social studies, and language arts classes in grades 4–9, and they suggest that such methods may be more difficult to implement in upper-secondary grades.²⁹ Likewise, a study of cooperative learning in secondary schools noted the greatest success in eighth and ninth grade math and language arts classes. Of the methods reviewed in this study, Student Teams-Achievement Division (STAD), with an 89% success rate, was most successful; other methods reviewed were Team-Games-Tournament (75% success rate), Learning Together (73% success rate), Group Investigation (67% success rate), and Jigsaw (17% success rate). The study concluded that the successful implementation of cooperative learning strategies in grades 10–12 requires significant teacher preparation in orienting high school students to these new types of classroom procedures and in teaching cooperative skills to students.³⁰

The variety of models of cooperative learning provide a repertoire of strategies which teachers can use to accommodate wide-ranging differences in skill and achievement levels in mixed-ability classrooms, including classrooms in which special education and general education students are integrated. Research indicates that these approaches may have many advantages over traditional instructional models, and may have especially important benefits for African-American and Hispanic students.

MODELS OF COOPERATIVE LEARNING

The variety of models of cooperative learning provide a repertoire of strategies which teachers can use to accommodate wide-ranging differences in skill and achievement levels in mixed-ability classrooms, including classrooms in which special education and general education students are integrated. Group members are expected to share information, knowledge, and personal perspectives while completing a group task. Thus most cooperative learning activities include both an academic and a social skills objective.

In the past fifteen years, educators have designed and researched a number of different models of cooperative learning. Many have proved especially beneficial to students who have experienced little success in classes organized around traditional instructional approaches. These models of cooperative learning include:

Learning Together³¹

Students work together in four-or five-member heterogeneous groups on assignments to produce a single group product. Students may be evaluated and rewarded on the basis of this single product or on a combination of their own performance and the overall performance of the group.

Group Investigation³²

Students work in small heterogeneous groups and assume substantial responsibility for deciding what information they will gather, how they will organize themselves to gather it, and how they will communicate what they have learned to their classmates. For example, a group might choose a subtopic within a class unit, break down this subtopic into individual tasks for each member of the group, and prepare a group report, presentation, or display for the whole class.

Jigsaw³³

A subject or topic to be learned is divided into sections or subtopics and each member of a heterogeneous "home base" group is assigned responsibility for one section. Members of different home base groups who are working on the same section meet together in "expert groups" to discuss their topics. They then return to their home base groups and take turns teaching groupmates about their sections. Students are evaluated individually through quizzes, projects, or the like.

Jigsaw II³⁴

Similar to the original Jigsaw, all students are first provided common information. Students then break into expert groups to study their specific subtopics. There is team recognition based on team scores and often a newsletter recognizing team winners and individual high scorers, in addition to individual grades and scores.

Team-Games-Tournament (TGT)⁵⁵

Students work together in four or five member heterogeneous teams to help one another master material and prepare for competitions against members of other teams. For the competitions, each student is assigned to a three-person table with students from two other teams who are similar in skill level. In this way, all students have an equal chance to earn points to contribute to their team score.

Students Teams — Achievement Division (STAD)⁵⁶

In this variation of TGT, games and tournaments are replaced with a quiz. Thus while both TGT and STAD combine cooperative learning with team competition and group rewards for individual performance, STAD depersonalizes the competitive aspects of TGT. Quiz scores are translated into points based on how a student's individual score compares with the scores of other students of similar ability — whose identities are not disclosed by the teacher — or are based on individual improvement.

Team-Assisted Individualization (TAI)⁵⁷

Developed especially for math classes in grades three to six, TAI combines direct instruction by the teacher with follow-up practice using a team learning approach. Students work in heterogeneous teams on material appropriate to their individual skill level. Teammates help one another with problems and check one another's work. Meanwhile, the teacher calls forward up students from the various teams who are working at the same level to instruct them as a group. In this way, TAI provides for both interactive peer learning and individualized instruction.

Cooperative Integrated Reading and Composition (CIRC)⁵⁸

This method is similar to TAI but designed for instruction in reading, writing, and language arts. Students work in mixed-ability teams on a series of reading activities or, in writing, in peer response groups using the "process writing" approach.

Teachers of students at all levels must *teach* and *model* cooperative skills for their students; students cannot simply be thrown into groups and expected to work together. In most cases, the successful introduction of cooperative learning approaches will depend upon purposeful professional development on a school-by-school basis.

Indeed, teachers of students at all levels must *teach* and *model* cooperative skills for their students; students cannot simply be thrown into groups and expected to work together. Particularly when teachers first introduce cooperative learning into the classroom, they will need to monitor groups and intervene to teach collaborative skills if necessary. Consequently, in most cases, the successful introduction of cooperative learning approaches will depend upon purposeful professional development on a school-by-school basis.

Not all cooperative learning methods are equally effective. Of the various strategies, those that include group rewards based on the individual learning of all group members have been found to have greater positive effects than those that do not. For example, Jigsaw II will generally result in greater gains than the original Jigsaw model.³⁹

Moreover, although many forms of cooperative learning result in positive *affective* outcomes, Slavin has stressed that both group goals and individual accountability are essential for cooperative learning to result in positive effects on *achievement*.⁴⁰ Methods that combine the two elements, such as TGT, STAD, TAI, and CIRC, have been shown to have significantly greater positive effects on student learning than methods that do not. But even with these caveats, it is clear that to resist exploring the possibilities of cooperative learning is to ignore a promising approach toward making diversity work in Boston schools. As Slavin notes:

Research done up to the present has shown enough positive effects of cooperative learning, on a variety of outcomes, to force us to re-examine traditional instructional practices. We can no longer ignore the potential power of the peer group, perhaps the one remaining free resource for improving schools.⁴¹

Peer Tutoring

One of the most effective ways to respond to student heterogeneity in the classroom is to provide individualized tutorial assistance to vulnerable students. Given limited opportunities for teachers to provide such assistance, a promising alternative is a peer-tutoring model in which students tutor one another. Henry Levin has called peer tutoring "an ideal strategy for heterogeneous student groupings, since those who are more knowledgeable are tutors for those who need to master the material."⁴²

Like cooperative learning, peer tutoring must be implemented thoughtfully to be effective. For example, to avoid stigmatizing students labeled as "tutees," Good and Brophy suggest that teachers stress to all students that the goal of learning is for all students to achieve as much as they can and that success is not measured by comparing one student to others but by comparing a student's current achievement to past achievement. They also suggest that possibilities for cross-age tutoring be explored, as it is much less likely to have the potential stigmatizing effects of peer-tutoring.⁴³

It is commonly assumed that students with limited or no English proficiency must learn English before they can be integrated into mainstream classes. Thus, current practice often not only isolates language-minority children in segregated settings, but also offers them a below-grade level curriculum. The Program for Complex Instruction at Stanford University has developed several instructional approaches applying cooperative learning strategies to mixed-language settings to accelerate the learning of limited English proficient students. As Stanford Professors Elizabeth Cohen and M. Beatriz Arias explain:

Language-minority children have been marginalized and segregated because educators have believed that students must achieve minimal language proficiency before they can be exposed to grade-level curriculum (let alone activities including higher-order thinking skills)....The preoccupation with teaching English often precludes educational acceleration for these at-risk students.⁴⁴

But Cohen and Arias assert that "such students can participate successfully in a mixed-language, heterogeneous groups, develop higher-level thinking skills, and benefit from advanced course content, *while* they are learning English."⁴⁵ They suggest approaches to deal with linguistic diversity in the classroom while offering all students challenging, high-level instruction. In such strategies:

- Students work in groups of five or six members with mixed levels of English proficiency and academic skills;
- Students complete individual tasks but must not move on to another task until everyone in the group has completed the task;
- Students are taught to ask questions and give help and explanations without doing one another's work;
- Learning activities require a wide range of skills and abilities so that all children can contribute;
- Tasks are open-ended and include a degree of uncertainty so that each child is challenged at his or her appropriate level;
- Learning materials are rich, with context providing clues to meaning;
- Instructions are in as many languages as needed by the children.

Cohen and Arias note several potential barriers to the success of mixed-ability, mixed-language groups. First, because language-minority students are frequently a low-status group in schools, unless teachers address status problems explicitly, high-status students may dominate group activities. Second, a compartmentalized curriculum may hinder such an approach, which seeks to integrate subjects and skills. Cohen and Arias suggest that teachers will require substantial training and a strong foundation in the underlying theory and research of "complex instruction" for it to be successful.

One instructional program employing the strategies of "complex instruction" is "Finding Out — *Descubrimiento*," a bilingual science program integrating hands-on, experimental activities with elements of cooperative learning and peer tutoring. The Hoover Elementary School in Redwood City, California, one of the schools working with the Stanford Accelerated Schools Project to become an "accelerated school," is currently implementing this program.

ACCELERATED, COOPERATIVE LEARNING IN MULTIABILITY, MULTILINGUAL CLASSROOMS

Cross-age tutoring has been shown to have positive cognitive and affective effects on all students involved. Tutees gain by receiving intensive one-on-one instruction in a positive and supportive atmosphere while tutors' gain enhanced mastery of subject matter as a result of having taught it to others along with improved attitudes and self-concepts.

Cross-Age Tutoring

Generally used in elementary schools where teachers may easily arrange for upper elementary students to tutor primary ones and in projects which couple two schools of different levels together, cross-age tutoring has been shown to have positive cognitive and affective effects on all students involved. Tutees gain by receiving intensive one-on-one instruction in a positive and supportive atmosphere while tutors' gain enhanced mastery of subject matter as a result of having taught it to others along with improved attitudes and self-concepts. The potential benefits of the tutor role are perhaps greatest for low-achievers who are most in need of an opportunity to demonstrate their competence and boost their self-esteem.⁴⁶

One example of a successful cross-age tutoring program is the Valued Youth Partnership (VYP) in San Antonio, Texas — a community-based program developed by the Intercultural Development and Research Association (IDRA). First implemented in 1984, the VYP gives Hispanic students at high risk of dropping out of school the opportunity to serve as tutors for young elementary school students. As the tutors teach basic skills to their tutees, they themselves improve these skills and develop greater academic and general self-confidence. In the five-years since the program's inception, of 117 VYP tutors identified as at high risk of dropping out, all but two have remained in school. In addition, tutors' grades have improved while their rates of absence and discipline referral have declined. The school performance of the elementary students being tutored also has improved.⁴⁷

Peer and cross-age tutoring can be effective ways to provide extra assistance to younger students, and have been shown to result in significant positive outcomes for both tutors and tutees alike. But it is important to note that, as with cooperative learning approaches, teachers must provide students with extensive orientation and training before tutoring can begin. Teachers must be sure to both teach and model appropriate behaviors for all participants and to help tutors prepare appropriate instructional materials and tasks for tutoring.

Multiage Classrooms and Ungraded Schools

Schools determined to serve students of diverse abilities and backgrounds may have to re-examine fundamental aspects of the school structure, altering those currently acting as barriers to the success of many students. A growing number of educational researchers and specialists are concluding that traditional age-segregated schools and classrooms function as a major factor contributing to the sorting, labeling, segregation, and failure of many students and, thus, should be replaced with multiage, multigrade groupings.

Critics of age-segregated placements argue that they are simply not flexible enough to accommodate the diverse abilities, needs, and interests of heterogeneous groups of students. For example, Larry Cuban asserts:

Schools seek uniformity, and departures from the norm in achievement and behavior are defined as problems....One of the most inflexible of the structures of schooling is the graded school. The graded school categorizes, segregates, and, as a last resort, eliminates those whose performance and behavior deviate too sharply from the norm....To end these deviations, children must be grouped by ability. Separate classrooms or programs are established to "remediate" those who deviate too far from the norm.⁴⁸

In this way, the age-graded school actually increases the differences among children and exacerbates the disadvantage of those labeled "slow learners."

Likewise, in a review of research comparing age-segregated and multiage classroom groupings, David Pratt found that age-segregated environments stimulate competition and aggression among students and

are particularly difficult for children whose development differs from the norm. In conventional schools, the child of exceptional intellectual gifts is sometimes allowed or encouraged to "skip" a grade, which, although usually successful, is socially problematic and a poor substitute for genuine acceleration. The child whose development is slower than the norm faces the unmitigated disaster of grade repetition.⁴⁹

For these reasons, critics of age-segregated placements are increasingly advocating flexible, multiage groupings based on a "continuous progress" model, particularly in the early grades. According to a recent article in *Education Week*, "the concept is drawing renewed attention today as a way of curbing ability tracking and grade retention, two factors a growing number of educators identify as the detrimental precursors to failure for some young children."⁵⁰ Indeed, recent policy reports by the National Association for the Education of Young Children, the National Association of Elementary School Principals, and the National Association of State Boards of Education are suggesting that multiage groupings are a more developmentally appropriate way to deal with the diverse needs of young children than traditional age-segregated placements.⁵¹

Multiage grouping is also becoming increasingly popular, according to *Education Week*, "because it brings together practices at the forefront of current reform thinking, including team teaching, cooperative learning, literature-based reading, process writing, theme-based learning and reductions in 'pullout' programs for remedial and special education students."⁵² According to Lillian G. Katz director of the ERIC Clearinghouse on elementary and early childhood education at the University of Illinois, "When you combine the evidence from cross-age studies, mixed-ability grouping, and cooperative learning literature, you've got a super case for mixed-age grouping."⁵³

Research on the effects of multiage grouping on student achievement is scarce, although Goodlad and Anderson cite 1970s research showing test comparisons favoring multigraded programs over age-segregated ones. Data regarding the affective benefits of multiage groupings, however, is much more promising; studies of mental health, school attitudes and motivation, and peer relations greatly favor multiage and ungraded groupings. Such affective benefits are likely to affect positively student's academic success as well.

Studies of mental health, school attitudes and motivation, and peer relations greatly favor multiage and ungraded groupings. Such affective benefits are likely to affect positively student's academic success as well. But educators stress that to achieve positive results, restructuring such a fundamental feature of school organization as age-grouping must entail much more than merely placing students in mixed-age groups.

But educators stress that to achieve positive results, restructuring such a fundamental feature of school organization as age-grouping must entail much more than merely placing students in mixed-age groups. "Abolishing grades and changing nothing else would be simple-minded folly," asserts Cuban. "Grouping, teaching, and curricular practices also need to be examined."⁵⁴

Indeed, the implementation of multiage grouping in most schools will require thoughtful and purposeful planning on the part of both teachers and administrators, more attention to teacher organizational skills, and the introduction of new curriculum materials and instructional strategies, as well as the re-examination of school-based, districtwide, or state-mandated policies which may act as barriers to such reform. For example, Vito Perrone, director of teacher education programs at Harvard, warns that the push for national goals and uniform testing programs may work against the implementation of multiage grouping. Indeed, in North Carolina, early efforts to initiate a continuous progress model in the early elementary grade were squelched by the drive for increased accountability in the form of extensive student testing and evaluation of teacher performance.⁵⁵ Moreover, multiage and ungraded programs must not be permitted to function as a vehicle for resegregating students into homogeneous ability groups.

Nevertheless, the potential of multiage and ungraded groupings to educate diverse groups of students together in schools is reason enough for further investigating such alternatives to age-segregated placements. Indeed, as Pratt asserts:

Environments that include a range of ages must be considered if they promise greater cooperation, nurturance, and friendship, for no apparent cost....The evidence on multiage grouping appears to confirm the basic principle that diversity enriches and uniformity impoverishes.⁵⁶

The Challenges of Alternatives

Alternative instructional and curricular strategies share a fundamental rejection of the traditional remedial approach to the education of vulnerable students and a refusal to treat these students as inherently "deficient." They emphasize that schools can and do make a difference in student learning, and that schooling can be reconceptualized and restructured to provide all children with challenging educational experiences in mixed ability groups. The success of these strategies for all students, not just those defined as "most able," belies the assumption that students of differing achievement levels must be separated and provided differing educational programs "for their own good," and suggests that classroom teaching and curriculum can be remodelled to make homogeneous groupings obsolete.



Reformed School Restructuring

New Districts from
Across the Country

"Drawing nationwide examples in practice and policy send an important message to the Boston Public Schools that, given leadership and commitment, willingness to adopt new instructional methods, concrete support for professional development, and an on-going public education campaign, Boston's schools too can become communities where the principles of equity and excellence exist side by side."

While the decentralization of school governance may be an essential component of a restructuring effort, school-based management alone will not change students' experience in schools, particularly inasmuch as that experience is shaped by Boston's ability grouping and tracking practices.

Any effort at school reform in Boston must include a fundamental restructuring of schools within a policy context that promotes de-tracking and the alternative teaching and curricular models that support it. Reforms at the classroom, school, and district levels must strive to reduce the isolation of students labelled "different," broaden the definition of the mainstream to accommodate student diversity, and extend the advantages of state-of-the-art practices to all students. As we have noted, these goals will require changes in schools' organization, curriculum, and instruction.

Recent initiatives in Boston provide hope that school-based management will encourage school reform by shifting authority from the central school administration to individual schools. But while the decentralization of school governance may be an essential component of a restructuring effort, school-based management alone will not change students' experience in schools, particularly as the experience is shaped by Boston's ability grouping and tracking practices. As the Education Commission of the States has recently noted:

Without a change in how curriculum and the school day are organized, accompanied by changes in instructional strategies and student grouping arrangements, it is unlikely that administrative or governance changes will increase student achievement, especially for those who need it the most.¹

Such systemic reform represents an undertaking of vast proportions.

Eliminating Tracking at the School Level

Examples from across the country suggest that some schools are beginning to implement change where it matters most — in the daily experiences of students. These schools are engaged in a process of restructuring to broaden the mainstream by eliminating the harmful sorting, labeling, and grouping of students according to their "differences." While these national models of de-tracking cannot necessarily be transported wholesale into Boston, they at least suggest the potential for similar restructuring efforts in this city.

Daniel Webster Accelerated School, San Francisco, California

In 1988, teachers at this elementary school in one of San Francisco's poorest neighborhoods voted to become an "accelerated school," committed to improving the achievement of its students through the strategy of accelerated learning developed by Henry Levin of Stanford University. The school eliminated ability grouping and required teachers to move all their students along together. The school's restructured curriculum is interdisciplinary and emphasizes a language-based approach, even in mathematics. Instructional activities include cooperative learning and peer tutoring to meet individual needs and narrow skill gaps. The overriding goal of the school is to move every student onto grade level and into the mainstream by the end of sixth grade.²

The Stanford University Accelerated Schools Project is working with Daniel Webster and other schools in California, Missouri, Illinois, and Utah as they remake themselves into accelerated schools. Recognizing that those closest to students generally have the best understanding of their needs, the Project places most decision-making responsibility in the hands of the schools' teachers, parents, and students themselves. By involving school-based staff in decision-making and planning, the Project seeks to ensure that staff will have an "investment" in school restructuring and communicates the message that schools can significantly influence student learning. As Levin explains, "We have found that when the school staff work together to address the educational needs of at-risk students, they can develop the leadership, initiative, and many of the necessary skills for managing at-risk education."³

This kind of school-based leadership has proved vitally important because accelerated learning depends upon an overall change in the school environment; it is not merely a curricular approach that can be added on to the instructional program of a school. According to Levin, accelerated learning means "getting schools to take responsibility for the education of kids. It places the bottom line at the level of teachers, parents, and ultimately schools."⁴

Montlake Elementary School, Seattle, Washington

This racially-mixed elementary school in Seattle, where half of the 243 students are from single-parent homes and more than one-third qualify for the federally-funded school lunch program, has been restructured to eliminate all pull-out programs. "We were pulling kids out for special education, we were pulling kids out for Chapter 1 remedial education, we were pulling kids out for special-needs instruction," says Principal Levaun Dennett, "and it wasn't working." Students at Montlake are no longer labeled "handicapped" or "slow," and the results have been striking. As Dennett notes, "We saw kids who had been labeled and had considered themselves handicapped begin to drop that and to think of themselves just as kids who were learning."⁵

Some schools are beginning to implement change where it matters most — in the daily experiences of students. These schools are engaged in a process of restructuring to broaden the mainstream by eliminating the harmful sorting, labeling, and grouping of students according to their "differences."

Students at Montlake are no longer labeled "handicapped" or "slow," and the results have been striking. As Dennett notes, "We saw kids who had been labeled and had considered themselves handicapped begin to drop that and to think of themselves just as kids who were learning."

The school now groups children in the morning according to skill-level, rather than grade-level, for basic skills instruction. The librarian, science teacher, special education teacher, and Chapter 1 teacher are all assigned to teach these groups, thereby reducing class size to an average of 15 students. In the afternoon, students return to their grade-level classes for instruction in social studies, science, and other subjects. The Montlake approach is thus more prevention-oriented than traditional remedial programs, reports Stephen Fink, the special programs coordinator of another Washington state school district that has tried similar innovations. "By lowering the class size and making a qualitative difference up front," Fink explains, "what you hope is that you can prevent kids from falling behind."⁶

Over time, Montlake's restructuring efforts have resulted in benefits for students and staff which have included improved morale, fewer discipline problems, test score gains, and increased use of innovative and effective classroom techniques such as cooperative learning. Yet the school's restructuring has not been without costs. The school has been struggling to regain funding it lost when it was judged to be out of compliance with federal Chapter 1 regulations and federal, state, and local special education regulations because it wasn't labeling kids and pulling them out of class for special services.

Recently, however, Montlake was selected to participate in the Washington State program "Schools for the 21st Century," through which the school will receive money for innovation and waivers from state and local requirements. Furthermore, the recently revised Chapter 1 regulations make a whole-school approach to service delivery, such as that being implemented at Montlake, much easier. By freeing up funds so they can be applied to schoolwide projects rather than stipulating that they go to specific remedial programs, the new regulations allow schools to go beyond the traditional approach to compensatory service delivery which focuses on the "deficiencies" of individual students and move toward altering school practices to strengthen the whole school. With such an approach, the focus can shift from remediation to prevention, and services can be provided *before* students are categorized and labeled.⁷

Desert Sky Junior High, Phoenix, Arizona

In 1983, this junior high school had 38 remedial and accelerated classes. At the start of the 1987-88 school year, it had none. Nearly every student now works in cooperative learning settings, a change that has resulted in improved learning for all.

In the fall of 1984, Desert Sky Junior High initiated three sections of heterogeneous grouping in reading, English, and mathematics, with the goal of comparing the academic achievement of students in mixed-ability classes with that of students in tracked remedial, average, and advanced groups. Cooperative learning became the key instructional strategy in the heterogeneous classes. By the end of the year, comparisons showed gains for all levels in the heterogeneous classes. Remedial students in the mixed classes experienced the greatest gains, while advanced students performed well in both the homogeneous and heterogeneous settings but did slightly better in the mixed setting.

Eliminating tracking hasn't been easy, concedes Phil Swartzbaugh, Assistant Administrator for Curriculum in Desert Sky's district. "To modify a school whose operation has depended on ability grouping for many years is a tremendous challenge; change is difficult. However, when the benefit to youngsters in terms of higher achievement and greater success is clear, we must accept the challenge."⁸

Claremont Middle School, Claremont, California

When Barbara Daniels was appointed principal of Claremont Middle School in early 1982, the school had twelve levels of mathematics classes ranging from "remedial" to "gifted." When classes opened again the next school year, math tracking had been eliminated. At the same time, rather than provide below-level textbooks to students with below-level skills, the school gave students with poor skills books at their grade level along with extra help and support.

During the 1970s, students at Claremont Middle School had had persistently low test scores, and the school had lost many of its white students. With the arrival of a new principal, staff began to reassess the school's program. This reassessment resulted in some changes: electives were cut back and science added as a requirement for all students; foreign languages were made into full-year courses rather than short electives; the last period of the day became a study hall; tutoring was offered to all students; and a lab previously used for low-achieving "pullout" students was converted into a computer center to be used by all students. The school's present goal is to eliminate tracking in language arts classes.

Claremont's current principal Gail Hojo explains that the school emphasizes personal support and high expectations for *all* students. "We stress that everyone needs help at some time. There's no labeling," says Hojo.⁹

Middle School of the Kennebunks, Kennebunk, Maine

Back when the school was a junior high school, says Sandra Caldwell, principal of the Middle School of the Kennebunks, staff looked at the school's program, "and we saw we were offering different levels of education — first-rate, second-rate, and third-rate — to different students." Determined to offer equal access to high-quality education to all students, the school rejected the practice of tracking, reduced the use of pull-out strategies, and placed all its students into heterogeneously grouped teams.¹⁰

With heterogeneous grouping, curriculum and instruction changed drastically. Each grade is now divided into two teams, and each team has a team leader. The team leaders work together with other team members — teacher/advisors — to coordinate instruction into interdisciplinary units, set up academic programs and schedules, and plan special activities. A major benefit of the teaming concept, interdisciplinary teaching helps students see the relevance of school learning through a broad academic spectrum.

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Because school staff recognize that all people learn and demonstrate learning differently, instruction at the school centers around four different learning methods: lectures to transmit information; simulations, demonstrations, and discussion to clarify complex subjects and make abstract ideas more concrete; independent study projects to make students more responsible for their own learning; and the creative arts to encourage students to develop and apply creative skills as tools of learning. The underlying goal of these instructional strategies is to involve students in their own education and get them excited about their capacity to learn. Notable features of the school include Project GRASP (Giftedness Reaching and Serving People), which seeks to identify and nurture a "gift" or talent in every child and provides enrichment workshops in a wide variety of academic and nonacademic areas; "Kids Teach," a cross-age tutoring project; and a "teaming approach" to the mainstreaming of youngsters with learning disabilities, in which regular education and special education teachers work together in a classroom with both regular education and mainstreamed special education students.

The Middle School of the Kennebunks strives to accommodate the diverse academic, emotional, and social needs of its students during the period of rapid but unsteady growth and development characteristic of early adolescence. The school is firmly grounded in the philosophy of the "middle schools movement," which promotes the grouping of students in heterogeneous teams or clusters.

A nationally recognized School of Excellence and a member of John Goodlad's National Network for Educational Renewal, the Middle School of the Kennebunks strives to accommodate the diverse academic, emotional, and social needs of its students during the period of rapid but unsteady growth and development characteristic of early adolescence. To this end, the school is firmly grounded in the philosophy of the "middle schools movement," which promotes the grouping of students in heterogeneous teams or clusters; close, supportive, and mutually respectful relationships among teachers and students; an interdisciplinary curriculum structured around common learning themes; flexible block scheduling; active learning and peer interaction; school-community connections and collaborations; and a strong advisor-advisee program.

Instruction at the Middle School of the Kennebunks is perhaps best summed up by one objective in its *Guide to Student Services*: "We try to teach you a lot more than you will find in books." At the school, this effort includes learning about the meaningful differences that exist among people as well as the things they have in common, so that students may develop a healthy respect and understanding of the diversity that exists within their school and in the world.

Central Park East Schools, New York, New York

A network of alternative schools in New York City, the Central Park East schools are "progressive school[s] in the tradition of so many of New York's independent private schools."¹¹ But Central Park East schools accept students on a first-come, first-served basis rather than creaming the top students. With an enrollment of 75% African-American and Hispanic students, 75% from households with incomes under \$20,000, and 20% with "apparent learning disabilities," the schools that make up the Central Park East network reject the practices of ability grouping and tracking and provide all their students with a common core curriculum and access to high status knowledge.

Central Park East began in 1974 as one elementary school founded as part of the parent choice plan in New York's District 4. The school was so successful that its founder Deborah Meier was asked by the district superintendent to establish another school. By 1985, Central Park East had become a network of three elementary schools for grades kindergarten through six and one secondary school for grades seven through twelve.¹²

The schools of Central Park East have adopted a variety of state-of-the-art practices to meet the diverse needs of their students. Multigraded classes respond to varying rates of academic and social development, while grouping all students with the same teacher or teachers for two years in a row encourages personal relationships among students and teachers. At the secondary level, students at Central Park East Secondary School (CPESS) are organized heterogeneously into houses of about eighty students, each with a faculty of four. Once each week, the staff of each house meets during lunch to discuss the progress of individual students and the overall work of the house. And one morning each week, while students work in the community, teachers from each department are provided with uninterrupted common planning time to work on their interdisciplinary curriculum. As a member of TheodoreSizer's Coalition of Essential Schools, CPESS reflects the Coalition's philosophy that "less is more" and that students in schools that try to teach "everything" often learn nothing in great depth. Thus, the instructional day at CPESS is divided roughly in half, with one class — either humanities or math/science — all morning and the other all afternoon. Spanish, dance, gym, and computers are offered optionally before or after school.

Rather than trying to teach "everything," Central Park East schools emphasize the teaching of thinking behaviors and "habits of mind" that will become the basis of future learning. Instructional activities at all Central Park East Schools emphasize active, cooperative learning and exploration organized around themes chosen by the teachers, rather than skill-based instruction, lectures, or textbook learning. In the early grades, themes tend to be concrete and directly related to the students' immediate environment, such as "Skyscrapers" or "The City." In secondary grades, more abstract themes are introduced; for example, when the eighth grade humanities sequence is structured around the theme of "Power," the curriculum of the first semester focuses on the Divine Right of Kings and the American and French Revolutions, while that of the second semester centers around nonrevolutionary change in America — union movements, civil rights, and women's rights. The focus on themes and content rather than skills facilitates heterogeneous groupings, because all students may work together regardless of individual skill level.¹³

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Policies to Promote De-Tracking

Districtwide policies designed to mobilize and sustain broad-based support for de-tracking can support and facilitate schools restructuring initiatives. Examples of such policies highlight the need for on-going outreach to all constituencies — teachers, parents, and students — to develop support for new models of instructional grouping.

San Diego Unified School District, San Diego, California

The San Diego Unified School District is the ninth largest in the nation, with a K-12 enrollment of 116,500. Like Boston, it is racially and ethnically diverse, has a sizable "gifted" program, and has large bilingual and special education populations.

In the early 1980s, district leadership in San Diego became increasingly concerned with achievement gaps among students of various racial and ethnic groups and began to question district policies and practices regarding instructional grouping and student placement. For one year, a committee of school and district administrators met regularly to review the research on instructional grouping and discuss the equity issues raised by their research. With the goal of ultimately developing more equitable grouping practices, the committee organized three conferences to present its findings and recommendations to school administrators, teachers, and other staff. Meanwhile, the San Diego Board of Education held public hearings that ultimately led it to adopt an "equity policy" stating:

Equity in student placement means equal access to the highest degree of quality education for all students. Access is here defined as entrance to courses based on meeting established criteria for enrollment.

Over the next five years, studies were conducted throughout the district of various issues related to grouping, tracking, and equity. These studies focused on staff assumptions regarding instructional grouping; scheduling and placement practices; course enrollment patterns; curricular offerings at various achievement levels and prerequisites; placement of K-6 students in the basal reader program; and remedial classes. The conclusions mirrored findings of national research as to the harmful effects of ability grouping and tracking.

Guided by policy and the findings of these studies, the district determined to eliminate low-level classes at the secondary level; strengthen efforts to encourage racial and ethnic minority students to remain in school and prepare for college; increase teacher training in Gender Expectations and Student Achievement (GESA) and Teacher Expectations and Student Achievement (TESA); and assign students heterogeneously to regular self-contained classrooms in elementary schools and to secondary school courses, so that the population of all classes would be representative of the total school population excluding students in LEP and special education programs.

Guided by the findings of districtwide studies, San Diego Schools determined to eliminate low-level classes at the secondary level; strengthen efforts to encourage racial and ethnic minority students to remain in school and prepare for college; increase teacher training in Gender Expectations and Student Achievement (GESA) and Teacher Expectations and Student Achievement (TESA); and assign students heterogeneously to regular self-contained classrooms in elementary schools and to secondary school courses.

Perhaps the biggest change implemented in San Diego is the introduction of a high school core curriculum, designed to provide all students with the academic background necessary for high school graduation, college entrance, and meaningful employment. The purpose of the new core curriculum is to encourage all students to pursue a challenging course of study. Thus, for example, low-level courses such as consumer, general, and career mathematics are being phased out, and all students are required to take biology and algebra.

The San Diego district hopes to ensure full implementation of the core curriculum at all secondary schools by 1989, so that its class of 1994 satisfies the graduation requirements. "The theoretical base for core curriculum," according to a report by the district's evaluation department, "is the belief that all students can learn, that excellence and equity must be dealt with simultaneously, [and] that all students must participate in a strong academic curriculum." But the district also recognizes that a more rigorous curriculum and higher standards without support are doomed to failure, and thus has stepped up staff development, parental involvement, and support services for students.¹⁴

The success of San Diego's effort toward achieving greater equity in student placement has been dependent upon the effective leadership of the district superintendent and other administrators, an informed and concerned school board, and broad-based community support. Indeed, the evaluation department report concluded from the policy-making experience that effecting change in grouping and tracking policy in any district requires sustained and purposeful effort on the part of district leadership, the board of education, and school site staff; extensive community support and collaboration in the implementation of new policy and practice; a sound research base strengthened by wide dissemination of local and national research findings to create a broader understanding of the issues and acceptance of the necessity for change; and persistence in the collection, analysis, and publicizing of data.

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Ann Arbor Public Schools, Ann Arbor, Michigan

In the mid-1980s, the Ann Arbor Board of Education received a variety of reports expressing concern about instructional grouping practices in the district's schools. A Title IX Monitoring Committee had reported consistently high proportions of black students enrolled in "basic" and "low-level" courses and consistently low proportions of these students in regular, accelerated, and advanced placement courses. In response to these findings, the Board established a community-school Task Force on Instructional Grouping to assess Ann Arbor's tracking practices. The Task Force ultimately reviewed research findings and legal decisions related to ability grouping and tracking, collected data on these practices in Ann Arbor, developed a policy statement on instructional grouping, and issued recommendations to the Board of Education.

The Task Force's data analysis mirrored much of the national research on ability grouping and tracking, revealing, for example, racial disproportions in both low and high ability groups or classes; evidence that students were held for long periods of time in stratified groups without reassessment; and marked differences in classroom climate between low track and high track classes. The Task Force concluded that Ann Arbor's grouping practices were resulting in increased segregation in the district and markedly different educational experiences for students in various tracks. As a report by the superintendent noted:

A significant number of students are receiving an inferior education, one substantially different in both content and instructional method....Ability grouping in the schools has tended to exaggerate initial differences among students. Separation of students in this way has contributed to a widening of the achievement gap among them rather than to a narrowing as had been hoped.¹⁵

In August, 1986, the Task Force presented its findings and a draft policy statement on instructional grouping to the Board of Education, which then approved a plan to develop a policy that would address the problems identified.

During the 1986-87 school year, district administrators convened a series of school-based and districtwide meetings and workshops with teachers, administrators, community groups, and parents. This public education effort established support among all constituencies for a policy on instructional grouping. The culmination of the participatory policy-making process came in July, 1987, when the Task Force presented its final report, a policy statement on instructional grouping, and recommendations for change.

The policy statement drawn up by the Task Force ultimately focused on a set of expected student outcomes as a guide to further decision-making. Policy guidelines established a set of principles by which schools would seek the development of the maximum potential of each child. In addition, the Board adopted a five-year plan for reform of instructional grouping practices, the goals of which included communicating high expectations, broadening access to knowledge, providing adequate support, and extending state-of-the-art educational practices to all students.

During the 1987-88 school year, the Ann Arbor School District initiated a variety of reforms. Each school was provided an additional \$35,000 to develop a plan to meet the individual needs of students, and districtwide and school-based staff development opportunities were increased, with a focus on training in multicultural issues and alternative instructional methods for heterogeneous groups. Data on student placement in elementary reading groups and secondary grade course enrollment in math, science, and English were collected and monitored according to race, gender, and disability.

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That same year, changes were also made in the ninth and tenth grade math and English curricula to reduce the tracking of students and to ensure that all students benefit from a core curriculum designed to prepare them for advanced courses. In both subjects, the lowest two courses were eliminated and replaced with more comprehensive courses designed to provide students with access to more advanced knowledge. Support labs were established for tutorial help.

The success of Ann Arbor's effort to create and implement a district policy on instructional grouping owes much to the involvement of a variety of groups in the policy-making process. Broad-based participation established a strong base of support for the policy and its implementation, especially among teachers and administrators. Also essential to the process were an informed, supportive Board; a superintendent capable of providing visible staff support to the Task Force and leadership to keep instructional grouping a district priority; and a Task Force chairperson able to respect the various points of view represented among participants in the process while remaining firm regarding fundamental goals.¹⁶

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Federal Support for De-Tracking and Restructuring: Revised Chapter 1 Law

Chapter 1, formerly Title I of the Elementary and Secondary Education Act, is the country's largest federal education program. Through Chapter 1, almost 90% of the nation's schools receive funds, based on the numbers of poor children served by the school, to provide compensatory education to low-achieving students. Chapter 1 is funded by the federal government, planned and operated by local educational agencies (LEAs), and monitored by state educational agencies (SEAs).

While Chapter 1 can claim some credit for improving the achievement of vulnerable students, several studies have raised concerns regarding the implementation of the program. For example, in 1987, the Congressionally-mandated National Assessment of Chapter 1 noted that:

researchers have argued that current approaches to compensatory education systematically underchallenge disadvantaged students and that continual drill and repetition of basic skills limits Chapter 1 students' opportunities to progress to more challenging material....Most Chapter 1 reading and math projects observed in public elementary schools provided students with few opportunities to engage in higher-order skills. In reading, for example, students were taught phonics and vocabulary and read words or sentences. They were rarely asked to read paragraphs or stories or to construe meaning from text. In math, students practiced computation skills and rarely applied math facts to solving problems.¹⁷

New federal policies related to Chapter 1 likewise provide a framework to facilitate school efforts to restructure to eliminate harmful instructional grouping practices. Specifically, the intent of P.L. 100-297 is to see that low-achieving students are not subject to lower academic expectations than other students, nor deprived access to advanced, higher-order skills.

The following year, Congress responded to these concerns by passing the Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988, also known as Public Law 100-297. The Amendments give schools incentives to renew and improve their programs to maintain high quality and effect real improvements in student achievement. In particular, concerns raised about pull-out approaches resulted in new incentives to coordinate compensatory efforts with regular classroom activities and to encourage districts to develop schoolwide projects to benefit all students in eligible schools.

New federal policies related to Chapter 1 likewise provide a framework to facilitate school efforts to restructure to eliminate harmful instructional grouping practices. Specifically, the intent of P.L. 100-297 is to see that low-achieving students are not subject to lower academic expectations than other students, nor deprived access to advanced, higher-order skills. This provision of the Act is critical because, as a national Chapter 1 parents group notes, "If Chapter 1 programs do not successfully teach the basic and more advanced skills expected of all children, then the Chapter 1 students will never be able to succeed in the regular program."¹⁸ These provisions together make Chapter 1 a potential vehicle for school-based de-tracking.

Equalizing Expectations for All Students

To qualify for funding under the new Act, the local Chapter 1 application must define the program's "desired outcomes" in terms of the "basic and more advanced skills that all children are expected to master," and describe how the program will help students attain these goals. "More advanced skills" are defined as "skills including reasoning, analysis, interpretation, problem-solving, and decision-making."¹⁹

The new Chapter 1 law also requires each LEA to review its Chapter 1 program annually to assess its effectiveness in helping students to achieve the "basic and advanced skills" identified in the local program application. Once every three years, the LEA must evaluate its Chapter 1 program in accordance with "national evaluation standards" and submit the results of the evaluation to the state education department. Based upon the results of program reviews and evaluations, an improvement plan must be developed and implemented by the LEA for each school that does not demonstrate "substantial progress" toward meeting its stated goals. If this improvement plan proves ineffective, the school district and the state, working with school staff and parents, must develop and implement a joint improvement plan. In addition, each district must identify individual students who have been served by the Chapter 1 program for a year and have not made substantial progress toward the local goals, and must consider modifying the program to serve such students better. Parents must be substantially involved in the improvement process.

Finally, the state agency must evaluate the LEAs' programs at least every two years, make the results of the evaluations public, and submit them to the United States Secretary of Education. States may set both general regulations for the Chapter 1 program and "objective measures and standards" for gauging program success.²⁰

Coordination of Chapter 1 and "Regular" Education

The new Chapter 1 Act also requires the local district to ensure it will allocate the time and resources necessary "for frequent and regular coordination of the Chapter 1 curriculum with the regular instructional program in the LEA." The legislative history of the Act explains that this provision requires school districts to examine the regular program and modify any features of that program that may be frustrating the success of Chapter 1 students, including the practices of ability grouping and tracking. Indeed, Chapter 1 students may be "disadvantaged" not solely because of their social status but also because school practices frequently condemn them to inferior schooling. As Representative Charles Hayes asserted in his floor statement for the House bill:

Many times minority and poor children, those often served by Chapter 1, are most at risk of being placed in lower tracks of the regular program, misclassified, given a watered-down curriculum, and held to lower expectations than their peers. All too often these students are assigned to a group or track which is itself not designed to accomplish mainstreamed achievement of the skills which the school has deemed appropriate for its students.²¹

The new Chapter 1 law implicitly rejects the common assumption that the failure of an intervention is the student's failure rather than the school's. The law calls decisively upon schools to accept responsibility for the success of their educationally disadvantaged students. Further, it suggests that the modification of both the Chapter 1 and the regular school program can enhance such students' chances for success.

Encouragement for Schoolwide Projects

In 1983, Congress added a provision to Chapter 1 permitting schoolwide projects in schools where 75% or more of the students were from low-income families. Such schools are granted the flexibility to use Chapter 1 funds to improve the overall school program to benefit all children in the school, as long as funds for educationally-deprived children are not decreased. Such schoolwide efforts are expected to change compensatory education from a program that focuses on deficiency and remediation to one that emphasizes prevention and support.

Before the recent changes in Chapter 1, however, few districts took advantage of the schoolwide provision, perhaps because districts implementing schoolwide programs were required to allocate matching funds for all students in project sites who were not eligible for Chapter 1 services. The National Assessment of Chapter 1 noted in 1987 that while over 5,000 Chapter 1 elementary schools were eligible for schoolwide projects, only 800 had implemented them. Moreover, the schools that had implemented schoolwide projects had "demonstrated somewhat limited applications of the concept of schoolwide reform" and the focus of their programs was "quite narrow." While these programs often incorporated promising features, "they aim[ed] at singular aspects of the school and as a result fail[ed] to capture the breadth of efforts characteristic of schools that are effectively serving poor students."²²

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With its emphasis on high quality programs and high expectations for Chapter 1 students, its provision for modifications in both Chapter 1 and the regular program to improve the chances of success for Chapter 1 students, and its encouragement for schoolwide projects, the revised Chapter 1 law provides new substantive rights to Chapter 1 students.

The 1988 Chapter 1 Act removes the requirement for matching funds and seeks to encourage schoolwide projects that move toward total educational reform. In exchange for the flexibility in the use of Chapter 1 funds and staff, the legislation calls for school-specific accountability and extensive parent involvement. These accountability provisions require active monitoring by the state and parents.

Chapter 1 Challenges: The Right to Good Educational Practice

With its emphasis on high quality programs and high expectations for Chapter 1 students, its provision for modifications in both Chapter 1 and the regular program to improve the chances of success for Chapter 1 students, and its encouragement for schoolwide projects, the revised Chapter 1 law provides new substantive rights to Chapter 1 students. These include:

- The right to the same expectations, curriculum, and academic challenges provided other children;
- The right to improvement in the Chapter 1 program if students are not making substantial progress toward achievement of the "desired outcomes;" and
- The right to changes in regular program practices — for example, the elimination of grouping and tracking practices — when they are frustrating the success of Chapter 1 students.

By establishing these rights for low-income children, the new Chapter 1 Act challenges schools to become environments that will foster the learning of all students enrolled in them.²³

A Call to Begin

These diverse nationwide examples in practice and policy send an important message to the Boston Public Schools that, given leadership and commitment, willingness to adopt new instructional methods, concrete support for professional development, and an on-going public education campaign, Boston's schools too can become communities where the principles of equity and excellence exist side by side. These examples stand as evidence that de-tracking can become a real and legitimate move toward restructuring. They challenge Boston to begin such an effort.

PHOTO: © WALTER S. SILVER



8 Restructuring in Boston

Promising Beginnings
in the Schools

"Boston desperately needs schoolwide reform founded upon a coherent vision of each school's mission to promote positive interaction among all members of the school community, to meet the challenges of student diversity, and to ensure access of all students to the best education the school can provide."

Despite a central lack of leadership, some school staff have initiated efforts to address the inequities of the status quo and to foster the achievement of all students. Exemplary in their attempt to meet the needs of diverse groups of students, these efforts may serve as guideposts for restructuring in every school in Boston.

Currently in Boston, policy is largely silent on the issues raised in this report. While lip service is paid to reducing the isolation of special education or bilingual students, for example, little districtwide action has been taken to address this goal short of discouraging special education referrals or accelerating the movement of bilingual students out of their program. These measures do little to change the manner in which the mainstream approaches the challenges of educating diverse groups of students.

Despite a central lack of leadership, some school staff have initiated efforts to address the inequities of the status quo and to foster the achievement of all students. Exemplary in their attempt to meet the needs of diverse groups of students, these efforts may serve as guideposts for restructuring in every school in Boston.

Boston desperately needs schoolwide reform founded upon a coherent vision of each school's mission to promote positive interaction among all members of the school community, to meet the challenges of student diversity, and to ensure access of all students to the best education the school can provide. This chapter describes current efforts in Boston which, however limited, may serve as guideposts for such reform.

Reducing Isolation of Special Education Students

Programs at Boston's Manning and Mackey schools highlight the potential of mainstreaming to give special education students a status equal to their non-disabled peers in their schools and classrooms. These programs evolve from a conscious decision to reduce isolation, embrace diversity, and extend high-quality education to all students as means of creating communities of learners in the school and classroom. In both cases, the testimony of the teachers involved suggests that the effort of risking new approaches pays off in terms of improved student achievement and class climate for both students and staff.

The Manning School: Modeling Mainstreaming

When Joseph P. Manning School principal Patricia Kelly first arrived at the Jamaica Plain elementary school in 1988, special education students ate lunch at tables separate from those of their regular education peers. "There was a big SAR kid who was reading at pre-primer level," explains Kelly. "He was always looking over at the big fifth grade boys, longing for contact with students closer to his own age." Today, this student is mainstreamed into a "regular" fifth grade class for science and computer, says Kelly. "And everybody sits together at lunch."

Currently, first through fourth graders with a variety of learning, social, and emotional disabilities are mainstreamed at the Manning for reading, language arts, and computer; fourth and fifth graders are mainstreamed for music; all special education students in all grades are integrated with their regular education peers in the school's music and dance program; and all fifth grade students participate together in a drug awareness program.

The mainstreaming program at the Manning reflects Pat Kelly's depth of commitment to the integration of special education students into the school's mainstream. Her efforts have been positively received by teachers, parents, special education students, and their general education peers, but teachers seem especially enthusiastic. Gwen Goodrum, who teaches a substantially separate class of students with learning disabilities, maintains that mainstreaming has greatly improved her students' "sense of self-worth" and reports that her mainstreamed students are better behaved and more responsible now than they were before mainstreaming. "Students who are mainstreamed," she asserts, "appear more confident in approaching a learning task. They are more willing to attempt a challenge and more willing to take responsibility for completing assignments and doing homework."

Likewise, Betsy Gould, SAR teacher at the Manning, has observed that her students have "gained self-confidence both academically and socially" as a result of being mainstreamed, that they feel more "included" in school life, and that they see their participation in regular classes "as an accomplishment." She also notes that her students and general education students have learned to "work together and help each other; [the] focus is on how they are alike rather than different." Similarly, LAB teacher Andrea Carda affirms that "most [general education] children readily accept and develop friendships with mainstreamed children."

Recognizing that successful mainstreaming entails much more than simply placing special education students into general education classes, the Manning School is working to build supports into its mainstreaming program and general education teachers participate in disability awareness training sessions sponsored by the Boston Children's Museum. Thus far, the school has been pleased with the success of its mainstreaming efforts. Its commitment to the further expansion and development of such efforts is reflected in its new schoolwide Chapter 1 initiative, which includes in its goals increased integration and the elimination of pullouts.

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A Mixed-Ability Sixth Grade at the Mackey Middle School

In a classroom at the Charles E. Mackey Mosaic Middle School¹ in the South End, Berta Berriz and Beth Handman have just finished explaining — in Spanish and English — the morning's art project. Approximately twenty sixth-graders are standing or sitting in groups of three or four around tables, busily decorating papier mache masks with tissue paper, paint, and glitter. One boy explains to a visitor that the class made the masks the previous week as part of an oral history project; they are meant to be representative of their own culture or that of the person they interviewed for the project. The mask in his hands looks like that of a Mayan warrior.

As absorbed as they are in their activity, the students pause frequently to talk with their tablemates, soliciting and offering artistic advice. They move freely about the classroom to gather materials and admire one another's creativity. Bolivian music plays softly in the background as the children work.

The positive classroom climate, supportive and cooperative peer relationships, and enthusiasm and engagement of teachers and students indicate that this is an Advanced Work class. In fact, however, roughly one-quarter of the children in this classroom are special education students. It is impossible for a visitor to tell which students fall into each category.

This classroom is one of Boston's bilingual sixth grades, where teachers and students use both English and Spanish and where both languages are equally accepted and valued. As a bilingual class, the classroom has a distinct multicultural emphasis. The positive classroom climate, supportive and cooperative peer relationships, and enthusiasm and engagement of teachers and students indicate that this is an Advanced Work class.

In fact, however, roughly one-quarter of the children in this classroom are special education students. The class combines Berta's bilingual speech and language special education students and Beth's bilingual Advanced Work class, although it is impossible for a visitor to tell which students fall into each category. The two classes now spend approximately three-fourths of the school day together, and while some reading and math is done separately, the classes are together for social studies, science, language arts, and all enrichment activities. The teachers explain that a combination of a thematic integrative curriculum and a strong emphasis on cooperative learning makes such heterogeneous student grouping successful.

The curriculum of Berta and Beth's class is informed by the philosophy of "integrated arts" and organized into interdisciplinary units with many opportunities for experiential learning and creative and artistic activities. It is, as Oakes and Goodlad recommend for classes of varying ability levels, "challenging, complex, related to life and — most of all — rich with meaning."² Organized around central themes rather than discrete skills, it is designed to challenge each student at his or her level and appeal to a wide variety of interests.

In a unit entitled "History and Humanity," for example, students study subjects such as "Black and African History" and "Gender Issues" — exploring issues of racism, sexism, civil rights, social change, and equality. Another unit, "Peace and Social Responsibility," incorporates the study of history, literature, sociology, and science by delving into such complex subjects as nuclear energy and weapons, environmental protection, and conflict resolution. This is clearly a "real life" curriculum, not concentrated on isolated facts, but on complex issues.

Similarly, language arts activities center around themes rather than skills and include oral history projects, journal-writing, the preparation of position papers on social and political issues, and "letters to leaders." Such activities allow students to explore serious problems and define their own values, responsibilities, and identities with respect to the larger society — as well as to refine their language skills. The integration of community resources into the curriculum, frequent field trips, and visits from community members further emphasize the connectedness of school learning and the "real world." For example, Greenpeace and the Audubon Society serve as resources for the study of environmental issues, and Berta and Beth have worked with the City Mission Society to develop a unique "life issues" program through which the class explores adolescent concerns such as self-esteem, personal values, sex roles and sexuality, drugs, and violence.

Perhaps most importantly, this heterogeneous grouping succeeds because nearly all learning activities include a cooperative component. Working in groups that include one student with disabilities and three or four advanced work students, students engage in assignments that require diverse abilities to complete. Often students will work on a group project at separate but interrelated tasks. Such cooperative learning activities, the teachers have found, are key to the successful mix of students of different strengths and needs.

When students work in groups on projects, say Berta and Beth, they have to find each other's strengths to be successful. Usually they find that every member of the group has something valuable to contribute. As the teachers explain:

One student, Francisco, was a brilliant artist but a poor reader. Although his academic skills were low, he was an asset to any group because of his meticulous artwork and creative writing....Marta, a strong academic student, was able to share her knowledge with others who needed extra help. Students learned to listen to each other's contributions and to negotiate. It was very exciting to watch. We realized that the children were able to absorb an incredible amount in a relatively short time by using this approach. It also encouraged a variety of learning skills that are not often addressed in a traditional program.³

At the end of each curricular unit, students receive both an individual grade and a group grade. The group grade provides another incentive for cooperation. Before a test, students help their groupmates study and ensure that all group members have mastered the material. Thus, while special education and advanced students are evaluated somewhat differently, all students have an equal opportunity to succeed and to contribute to the group grade. Because each member of the group has a stake in the achievement of every other group member, "there's no incentive for competition," explains Beth.

The success of Berta's and Beth's combined bilingual Advanced Work/special education class supports research findings affirming the importance of extensive peer interaction in mixed-ability classes in general. It also suggests that such interaction may play a crucial role in classrooms where special education students have been integrated with their mainstream peers. It stands as a model for innovative teaching combined with meaningful, thematic curriculum as a vehicle for learning for all students.

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Building Bridges Between Language-Majority and Language-Minority Students

As former assistant principal of the Agassiz School, Isabel Mendez recently called upon Boston schools to

establish programs where interaction among [diverse] students is meaningful and part of the culture of the school. By meaningful, I mean a program designed so that it encourages and promotes verbal exchange to accomplish mutual learning. This is a vision where bilingual students are seen as the mainstream too.⁴

Programs at Boston's Holland and Hernandez Schools represent just such a vision in their effort to promote greater integration of bilingual and monolingual English-speaking students to enrich the education of all students.

Two-Way Language Learning at the Holland School

In a large carpeted alcove of the lunchroom at the John P. Holland Elementary School in Dorchester, roughly thirty fourth graders are sitting in a large circle on the floor. Two teachers are leading them in a series of oral vocabulary drills, starting with names of numbers, then colors, parts of the body, and simple sentences such as "My name is ...," and "Good morning. How are you?" One might think this is pretty basic material for fourth grade children. But this is no ordinary fourth grade class. And the vocabulary being drilled is both English and Spanish.

JoAnn Penn, winner of a Horace Mann grant for "Getting to Know You Through Language," has paired her general education fourth grade class with Maria Fernandez's Spanish bilingual fourth grade class. For forty minutes each day, the two classes teach each other language arts. After the brief teacher-led exercises, the students split up into small heterogeneous groups with at least one bilingual student in each group. Through drill and coaching, the students help one another master the English and Spanish vocabulary, with bilingual and standard curriculum students serving as resources for one another.

In this unique instructional approach, through cooperative learning and peer tutoring, students of different linguistic backgrounds have the opportunity to expand both their academic and social skills and break down the school divisions that often prevent such learning from occurring. Penn believes the program has been "really well-received by the kids," and notes that it is "bringing the kids closer; they are playing together more." She says that her own English-dominant students enjoy learning a new language and appreciate the opportunity "to learn about people from other cultures and to get to know them as friends."

Through cooperative learning and peer tutoring, English-dominant students learn a new language and appreciate the opportunity "to learn about people from other cultures and to get to know them as friends." For the bilingual education students the program provides an opportunity to practice their new English skills with native English speakers, as well as to brush up on their own Spanish language skills.

For the bilingual education students the program provides an opportunity to practice their new English skills with native English speakers, as well as to brush up on their own Spanish language skills. In fact, Penn developed the idea for the program after listening to the concerns of bilingual parents of students now in mainstream classes who feared their children were losing their ability to speak Spanish. The approach also legitimates the native language and culture of the bilingual students and sends the messages that all languages are valued in the school and that all students can contribute to the learning of others.

Penn believes that arguments used to criticize such integrated programs in the past — whether on the grounds that they encroached upon the entitlements of bilingual students to separate bilingual programs or that they took time away from language arts instruction for native English-speakers — seem less relevant in today's diverse, multicultural society. Reflecting a more "additive" approach to bilingual education she explains, "We don't want to take away anything; we want to add to it — for all the children."

Two-Way Bilingual Learning at the Hernandez School

At 9:30 on a Wednesday morning, Rosa and Sarah sit side by side in their first grade homeroom at the Rafael Hernandez Elementary School in Roxbury. The girls and their classmates are working busily but quietly at their desks, arranged in three clusters with African-American, Hispanic, and white children in each cluster. On the walls hang displays of learning themes — colors, numbers, vowels, shapes, days of the week — some in Spanish, some in English, some in both languages.

Fifteen minutes later, the teacher calls "*Cambia*," the students put away their books and papers and get out their reading textbooks. Rosa and her Spanish-dominant peers remain in their homeroom where they are soon joined by the Spanish-dominant students from the other first grade homeroom next door. Meanwhile, Sarah and her English-dominant peers join the English-dominant students in the other first grade homeroom. For the next two forty-five minute periods, Rosa and Sarah will have reading/language arts instruction in their dominant language — Rosa in Spanish, Sarah in English. Later in the day, Rosa will receive instruction in English and Sarah in Spanish.

Down the hall in the two second grade classrooms, reading/language arts instruction has been structured somewhat differently. As in the first grade, in one of the classrooms, sixteen English-dominant children are reading and writing in English; but the adjacent second grade class, which normally would be composed of only Spanish-dominant children, now has both Spanish and English-dominant children. A teacher explains that several English-dominant second graders with superior English language skills were given the option of having two periods of Spanish instruction and one period of English instruction rather than two of English and one of Spanish. These students now receive Spanish instruction with their native Spanish-speaking peers, making language arts instruction more integrated by language.

Students at the Hernandez are taught to read in their primary language beginning in the first grade. Once they master the required reading skills and are performing at grade level — usually at the end of the first or beginning of the second grade — they begin to learn to read in their second language.

The Hernandez School, a pioneer in the development of two-way bilingual education, has been a two-way bilingual school since 1974. All of the 307 K-5 students at the school — 55% Hispanic, 28% black, and 17% white — are considered bilingual students. All are taught in both English and Spanish regardless of their native language.

Students at the Hernandez are taught to read in their primary language beginning in the first grade. Once they master the required reading skills and are performing at grade level — usually at the end of the first or beginning of the second grade — they begin to learn to read in their second language. Since all grades at the school have two forty-five minute periods of reading each morning, students are grouped for reading according to ability, often across grade level. This grouping by linguistic ability, rather than by grade, is referred to as “levelling” and is considered to be less harmful than other sorts of ability grouping because “levelled” students are grouped for only one or two discrete subjects, and their primary identification remains with their mixed-ability group.

Although language classes at the Hernandez tend to be homogeneous in terms of language dominance, social studies, science, and math curricula are “concept-based” and structured around monthly thematic units (such as animals, plants, holidays, and Latin American countries), allowing for heterogeneously grouped instruction in these subjects. The thematic curricular approach means that differences in language skills do not pose an insurmountable problem. The language used in these subjects is alternated, with one unit taught in Spanish, the next in English. For non-academic subjects, the language used is generally the primary language of the instructor.

Cultural awareness and the celebration of cultural differences constitute an integral and vital element of the instructional program at the Hernandez. Intercultural understanding is promoted through thematic curricular units; association with the community group Areyto; visits to cultural institutions such as the Museum of Science, Museum of Fine Arts, Otis House, and the African-American Meeting House; and the observation and celebration of Hispanic cultural holidays. In short, every aspect of the school focuses on exposing students to language and intercultural learning which will serve them well in an increasingly diverse city.

Effective Environments for Mixed-Ability Middle School Clusters

De-tracking in the middle grades must embody the "three highs" defined by the Edna McConnell Clark Foundation's Program for Disadvantaged Youth. The commitment to these principles — high expectations, high content, and high support for all students — is reflected in the daily routines, curriculum, and instruction of the multi-grade, multi-ability cluster developed at the former Mackey Middle School.

Extending Excellence to All at the Mackey Mosaic Discovery Academy

- "I think that all schools should have a Discovery Academy. This year has been the best year in school of my life and certainly not the easiest....I love Discovery Academy because the things I learn stick in my mind forever because of the way we learn things....I think without Discovery I would still make honor roll but the things I learn would not stick with me....Mrs. Amika can teach anyone who wants to be taught in the way she teaches now."
- "I think that this program should continue next year because it helps you on your level, not above, not below. You can work on things you feel you need to work on. I've learned to cooperate as a class and get what you have to do done."
- "I enjoyed this year. I'm sorry for all the headaches I gave you. I didn't mean it. Thanks for putting up with me. Not too many teachers or managers in stores do. I'm always getting kicked out. I learned a lot of new things this year. I made a lot of good friends too."
- "In this year, I've learned more things than last year. I'm going to MISS my best friends and teachers. I'm going to MISS the fun trips we had together with my classmates. I'm going to REMEMBER THIS YEAR FOR THE REST OF MY SCHOOL DAYS!!!"⁵

The Discovery Academy at the Mackey Mosaic Middle School in Boston's South End was established during the 1986-87 school year as an alternative program for academically vulnerable, overage seventh and eighth grade students who were recommended for the program by their teachers on the basis of poor past performance. Although originally conceived as a seventh-eighth grade cluster, during the first year of the program the seventh and eighth grade classes were essentially separate and self-contained. Considering the problems inherent in teaching homogeneous low-track classes, Discovery Academy's first year was remarkably successful, thanks to the small, community-like environment of the program; the experiential, interdisciplinary, exploratory curriculum; the emphasis on involving parents and community resources; and the program's remarkable teachers, including Barbara Ernst-Digennaro, known to all as "Amika."

Merely providing the most effective teachers to the lowest-achieving students will not necessarily improve student performance. Because students in low groups have few positive academic or behavioral role models, "their negative behavior and attitude is reinforced and supported by their classmates." However, considering the problems inherent in teaching homogeneous low-track classes, Discovery Academy's first year was remarkably successful.

That year Amika's experience reflected the fact that merely providing the most effective teachers to the lowest-achieving students will not necessarily improve student performance because, as researchers have noted, "even if teachers assigned to low track classes do not have undesirable attitudes and expectations, they will find it difficult to establish effective learning environments in these classes because of the defeatism, alienation, and flat-out resistance they are likely to encounter there."⁶ Moreover, as Amika points out, because students in low groups have few positive academic or behavioral role models, "their negative behavior and attitude is reinforced and supported by their classmates."⁷ Students defined as "low-ability" often resent their low status and respond defensively by refusing to conform to school norms and to commit themselves to learning. At best, such students will be apathetic toward school.

For Discovery Academy's second year, Amika decided to open the program up to all students regardless of ability level. As a result of this reorientation, her eighth grade class that year was made up of twenty students from diverse racial and ethnic backgrounds with widely varying needs and abilities. In fact, the class included students defined as "low-achievers" as well as the eighth grade valedictorian. While in its first year the program had been seen as a "dumping ground" for unmotivated and low-achieving students, it was now considered a valid, academically challenging option for students of all levels seeking an alternative to the traditional program. Having a choice about participation in the program "made a tremendous difference," according to Amika, and may have been especially important for the most vulnerable students. The voluntary nature of student participation in Discovery Academy stands in stark contrast to the experience of most middle schools students we interviewed who reported they were "just put" in their middle school clusters. Because the second year of the program was so successful, for the program's third year, 1988-89, participation was once again made voluntary and open to students of all achievement levels. In addition, the program, limited in its second year to eighth graders, was once again opened to seventh grade students, and the originally intended multigrade structure was finally realized with the program officially becoming a seventh and eighth grade cluster with two co-teachers.⁸

The driving vision for Discovery Academy is an expectation of success for all students. Committed to providing a challenging and developmentally appropriate education for a heterogeneous group of young adolescents, the program's organization and curriculum are responsive to the diverse needs of its students. The self-contained classroom organization of Discovery Academy personalizes the learning environment, enhancing the sense of community in the classroom. The multigrade team orientation and the experiential curriculum can well accommodate students of varying performance levels. To practice arithmetic skills, for example, Discovery Academy students regularly play the learning game "Equations," in which students assigned to heterogeneous teams help one another prepare for competition with members of other teams. The competitions themselves place each student, across grade and according to individual skill level, at a table with two other students. Because each student competes with another of the same skill level, everyone has an equal opportunity for success.

Young adolescent students in the middle grades go through a period of intense social and personal change and face a variety of developmental tasks related to the development of self-esteem and personal identity. Learning about their heritage and the experiences and accomplishments of their ancestors or family members can be a path to learning about themselves as well as to a broader historical understanding of their local community.

**A CURRICULUM RICH WITH MEANING
FOR YOUNG ADOLESCENTS**

Thus, while students in the Mackey School's Discovery Academy learn about history through textbooks, novels, biographies, and films, they also participate in an oral history project in conjunction with the Children's Museum and volunteers from Boston's Intergenerational Project, through which they interview older relatives and community members to receive first-hand accounts of the past. As part of the project, the students write personal histories of the immigration of their own families to the United States. These "Immigration Stories" make history come alive to the students in Discovery Academy and help them to see it as something intimately related to their own lives:

My great grandparents arrived in Boston from County Cork, Ireland, in the early 1900s or late 1800s. The reason they came to America is because jobs were scarce in Ireland and if they had a job the pay wasn't good. They came here so they could be successful, with a house and family....Their cousins helped them get jobs and homes in Boston. One of the troubles that they faced was prejudice against the Irish. Some places had signs hanging up that said, "NINA," meaning "No Irish Need Apply."

Thirteen years ago, in 1975, we came to Boston from Puerto Rico. We came to Boston because it is hard to get a job in Puerto Rico and we had too much trouble in our family. We did not have an apartment, but my aunt gave us a room to sleep in. After some days, my father got a job. He started to collect money to pay for an apartment. We didn't go to school until we found an apartment. We did not know how to speak in English....My first school was the William E. Russell Elementary School. That's where I started to learn English from teachers and friends.

On September 14, 1982, I escaped Vietnam. I intended to find the way to America where there is freedom. On the way to freedom's door I passed through one of the refugee camps in Indonesia. I stayed there for about nine months before going to America. At the camp they gave us very little food. When I was hungry I forced myself to eat the rotten fruit that the store owner threw away, and I didn't feel ashamed at all. I came to America on September 14, 1983 and a month later I went to school. I had school lunch in the cafeteria and I saw kids throw away good food....Now in America there is plenty of food, but I never waste it. This experience taught me that wasting food is not right.

These compelling accounts make history real and connect it to students' lives. Moreover, they help students from diverse ethnic and racial backgrounds understand and respect their differences as well as appreciate their commonalities. Such activities make concrete the concept of the classroom as community.

The curriculum of Discovery Academy emphasizes the development of skills for continued learning — how to collect information through reading, listening, research; how to organize and express ideas in writing, speaking, or through mathematics; how to evaluate and analyze information; how to reason and think critically; and how to organize and plan for action both individually and as a group.

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Moreover, a vital element of the Discovery Academy curriculum is its emphasis on group work and the development of social skills. Students work in response groups for writing and in learning teams to help one another master materials for tests; in addition, most exploratory activities incorporate elements of cooperative learning. Although difficult for many at first, most students eventually acquire the social and organizational skills required for group success. As one Discovery Academy student affirmed, "I learned that if you work together in a group, you can accomplish what you're out to accomplish."

Discovery Academy provides a small, personalized, cohesive community for students of diverse needs, talents, and backgrounds, and extends a challenging, effective, and developmentally appropriate education to each of them. The program encourages its students to explore the world around them and to discover knowledge, ideas, friends, a love of learning, and, indeed, themselves. As one eighth grader noted after she participated in a Discovery Academy exploration of the Mackey School neighborhood:

It's so interesting what you find out there. You would never know what's out there if you don't go out and see. That's what I learned to do.

Seeds of Reform

Clearly, these examples have obvious limitations. Indeed, these efforts stand out *because* they are exceptions. The months students spend in these settings are likely to be qualitatively different from the rest of their time in Boston Public Schools. Moreover, without leadership founded on a widely shared vision of schools as communities of learners, such efforts rarely become institutionalized and can disappear overnight, with little regard for the impact of their loss on the students and teachers involved. Finally, most of these models are not examples of whole-school change; and while they may be excellent programs themselves, they do not necessarily affect the whole school.

But school reform that works must be based on what teachers, students, and parents understand as possible. The examples we have described point the way to the possibilities of de-tracked schools even when they themselves fall short of this vision. Such are the efforts which Boston must identify and nurture so that they can enrich the entire system.

PHOTO: VERA WILK, SUNSHINE PHOTOS



9

Barriers to De-Tracking in Boston

"Boston Public Schools' emphasis on 'readiness' and 'basics first' has the effect of increasing the sorting, labeling, and tracking of students on the basis of their differences, and is likely to further exacerbate disparities and depress achievement."

A number of policies and practices initiated as "reforms" during the past several years currently function as barriers to meaningful, schoolwide restructuring that would broaden the mainstream to accommodate diverse groups of students. Initiated in the name of greater accountability, these reforms have failed to communicate an overriding vision for Boston Public Schools in terms of schools' purpose or meaning for the children and adults who work together in them every day.

The examples of promising approaches for integrating diverse groups of students in Boston's schools are indeed encouraging. Yet, as we have noted, they stand out because they are exceptions. Most of the programs serve only a small number of students within a school, and some for only a portion of the school day. But there is a growing consensus that "schools as institutions — not teachers or students or curricula — are the principal targets of reform. Excellent education comes from sound public institutions, not disparate programs; high-quality educational programs cannot exist in unhealthy institutions."¹ Thus, the focus of future efforts at educational reform in Boston's schools must be on strengthening the whole school environment for all students.

In Boston, a number of policies and practices initiated as "reforms" during the past several years currently function as barriers to meaningful, schoolwide restructuring that would broaden the school mainstream to accommodate diverse groups of students. Such "reforms" have served to narrow, rather than broaden, both what is taught in Boston's mainstream and the ways in which student success is defined and assessed. These reforms, initiated in the name of greater accountability, have been largely superficial, providing little incentive for schools to seek new ways to teach all students well. Above all, these reforms have failed to communicate an overriding vision for Boston Public Schools in terms of their purpose or meaning in the lives of all children and adults who work together in them every day.

Specifically, the emphasis on basic skills, high stakes standardized testing, rigid promotion and graduation standards, and the notion of student "readiness" support the sorting, labeling, and tracking of students at all levels and thus defeat any attempts to improve schools' educational mainstream. The removal of these barriers along with improved implementation of existing vehicles for whole-school reform, such as Chapter 1, are essential to free up Boston schools for real restructuring. While thorough de-tracking will require additional actions, addressing these issues will provide a beginning.

Nationwide Call for School Reform

In the late 1970s and early 1980s, falling student standardized test scores, falling teacher SAT scores, and a growing recognition of America's declining economic competitiveness in world markets led to calls, such as that of the widely-publicized 1983 report of the National Commission of Excellence in Education, *A Nation at Risk*, for sweeping educational reform. Numerous reports by educational commissions and task forces nationwide criticized schools for low academic standards, poorly-trained teachers, and a watered-down curriculum, while tax-payer revolts increased the demand for accountability for the spending of public funds for education.

In response to the demands for reform, states and localities across the country toughened curricula, lengthened school days, raised teacher certification standards, instituted extensive student assessment programs, and raised promotion and graduation requirements. According to Timar and Kirp, "Since 1983, the states have generated more rules and regulations about all aspects of education than in the previous twenty years."²

"Reform" in Boston

Boston was swept up with most of the country in this wave of educational reform, the profound influence of which is evident in Superintendent Laval Wilson's Boston Education Plan. Despite several promising proposals to promote effective teaching and successful student learning, the Plan ultimately is undermined by its overemphasis upon several key elements which, in fact, act as barriers to meaningful school reform.³

Like many states and districts nationwide, Boston policies equate educational improvement with student gains on standardized tests.

Misuse of Standardized Tests: A Barrier to De-Tracking

A key element of reform in Boston has been an increased emphasis on standardized testing. Like many states and districts nationwide, Boston policies equate educational improvement with student gains on standardized tests. Seen as a convenient, legitimate, and "objective" way to assure accountability and improve student achievement, teacher competence, and educational quality, the use of testing as an "educational reform" is based on a number of widespread, albeit faulty, assumptions — that test scores are fair, valid, and reliable measures of student performance; that the use of testing as a gateway for promotion and graduation will motivate students to achieve; that student test performance is a legitimate means of evaluating school programs; and that the use of test results will motivate school personnel to improve the school program.

In reality, however, such tests often produce results that are inaccurate, inconsistent, and biased against minority and low-income students.⁴ In addition, such tests often act to narrow the classroom curriculum and frustrate teachers, who may feel increasing pressure to "teach to the test." Even more harmfully, when used to determine promotion and graduation, such tests may lead to increased school failure for many students.

The overreliance on standardized testing functions as a significant barrier to de-tracking efforts in Boston's schools. Standardized tests perpetuate the practice of sorting students along a linear scale, a practice

at odds with contemporary research on child development, which emphasizes that considerable diversity exists in both the nature and the pace of child development....Unitary test scores and linear scaling of scores ignore the true complexity of human intelligence and thus provide a deceptive picture of individual achievement, ability, or skills."⁵

In short, the use of standardized tests to sort students into instructional groups and educational programs or to determine promotion from grade perpetuates existing inequalities.

In short, the use of standardized tests to sort students into instructional groups and educational programs or to determine promotion from grade perpetuates existing inequalities. And frequently such actions result in disproportionately large numbers of racial and ethnic minorities and low-income students in remedial education and disproportionately large numbers of white middle class students in "advanced" classes or tracks.

Standardized Testing and Promotion in the Early Grades: The Fatal Link

In the area of early childhood education, the Boston Education Plan calls for the screening of all prospective first graders to determine their "readiness." Those students deemed "not developmentally ready" for first grade may be placed in year-long "transitional" classes. Such classes have been introduced in a few Boston elementary schools in the past few years.

Yet the growing consensus among early childhood educators is that such an emphasis on "readiness" is *not* developmentally appropriate and actually may be harmful to young children. Indeed, the concern with student "readiness" has led to "the increasing use of standardized tests, worksheets and workbooks, ability grouping, retention, and other practices that focus on academic skills too early and in inappropriate ways."⁶ In fact, early childhood educators and experts are discouraging such practices and the increasing academization of early childhood programs.⁷

In Boston, policy has strongly supported the use of standardized test scores to determine which children will be retained in the early grades or to create extra-year "transitional" or "developmental" first grades, strategies which reinforce the idea that children must be ready for school rather than that schools must be ready for children. But, the practice of holding back "unready" or "immature" students is based upon faulty reasoning. As Nancy Karweit explains:

The youngest students in a kindergarten class typically do not fare as well as do the older students. However, this disadvantage is due to relative age within the classroom and not absolute age. Moving the cut off date only creates another pool of 'youngest' students, it doesn't solve the problem.⁸

Research results do not support the effectiveness of transition programs. In fact, studies have shown that students placed in transition classes performed less well on later tests of achievement and had lower levels of self-esteem and self-confidence than did similar students identified as potential kindergarten failures who were promoted to first grade.⁹

While the linking of particular cut-off scores on standardized tests to high-stakes educational decisions always poses enormous potential for harm, it is especially detrimental in the early grades where tests are least valid and reliable, and where the pressure and fear of failure they create may be extremely psychologically damaging. Moreover, using tests to sort students into educational programs constitutes an inappropriate application of such tests; the large variation in what is considered normal development for young children means that there is great potential for misdiagnosing and mislabeling such children on the basis of test results.¹⁰

In response to concerns about test validity and the impact of testing in early childhood, some experts are calling for the elimination of all standardized testing before the third grade.¹¹ Others suggest that such tests be supplemented with multiple and varied assessment procedures. And in accordance with recent research emphasizing the variability of individual development, particularly in early childhood, recent reports on issues in early childhood education have called for the creation of ungraded early childhood units for students of kindergarten and primary age. Such units would include students with special needs and limited English proficiency. As the National Association of State Boards of Education asserts:

Early childhood classrooms should contain a heterogeneous mix of children with various levels of skills and abilities. Furthermore, because the program is designed to serve the needs of children, rather than to fit them into a predetermined group, children should not "fail" and retention should be avoided.¹²

Multi-grade and mixed ability classrooms help stem the "tyranny of readiness" and create "a curriculum and classroom environment that responds to learning patterns of children within a given age range, to individual differences among children, and to cultural and linguistic diversity."¹³ Yet Boston has been slow to implement such alternatives, choosing instead to employ a single score on a single standardized test as a guide for placement and promotion decisions and to sort students into homogeneous classroom groups.

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The Narrowing of Curriculum

Many recent articles and studies have noted that an inordinate emphasis on standardized testing is likely to reduce the curriculum at all levels to fragments of information to be taught and memorized.¹⁴ As the National Association for the Education of Young Children puts it:

Testing narrows the curriculum. Inevitably teachers teach to the test. Many of the important skills that young children need to acquire in early childhood — self-esteem, social competence, desire to learn, self-discipline — are not easily measured by tests. As a result, social, emotional, moral, and physical development and learning are virtually ignored or given minor importance in schools with mandated testing programs.¹⁵

Testing, therefore, may harm elementary students not only emotionally — by subjecting them to undue stress and the possibility of early failure, but also intellectually, by teaching them that learning consists of merely memorizing a certain set of facts and figures and mastering discrete, isolated skills. As the NAEYC concludes:

Ironically, the calls for excellence in education that have produced widespread reliance on standardized testing may have had the opposite effect — mediocrity. Children are being taught to provide the one "right" answer on the answer sheet, but are not being challenged to think.¹⁶

Under pressure to raise scores, administrators and teachers at the school level must frequently sacrifice time that could be spent on critical thinking, reasoning, and problem-solving activities to drill students for tests.

In Boston, older students may also be harmed by the "dumbing down" of the curriculum that may result from an overemphasis on standardized tests scores. Under pressure to raise scores, administrators and teachers at the school level must frequently sacrifice time that could be spent on critical thinking, reasoning, and problem-solving activities to drill students for tests. This trade-off is dramatically evident at the high school level, where school goals suggest that improved test scores are being falsely equated with improved learning and students are condemned to permanent remediation in the service of improving test scores.

For example, many "strategies for math and reading improvement" identified and articulated by staff at individual Boston high schools, approved by zone superintendents, and submitted to the BPS Office of Curriculum and Instruction, suggest the extent to which standardized tests influence curriculum and instruction in Boston's schools. For example, the 1988–89 school year:

- Brighton High proposed implementing "timed reading exercises and practice tests;"
- Burke High initiated a "new reading course...to prepare students for the DRP [Degrees of Reading Power] test;" "individual conferences by Chapter 1 teachers....to inform students of their last score and to provide a study plan to improve next score;" a "new math course, Math Topics,...as an elective for students who have failed math one or more years [including] diagnostic testing, review of basic math objectives, and preparation for the MAT6;" and a "computer-based math testing program...in grades 9-10 math classes to improve student performance on MAT6."
- English High planned to "practice Metro [Metropolitan Achievement Test] in math classes," and introduced "quarterly math exams in all content areas, formatted similar[ly] to the METs [Metropolitan Achievement Tests];"
- Madison Park High proposed "a Test Preparedness Plan in all content areas to give students additional practice on basic skills;" and
- Snowden International High pledged to "incorporate multiple choice questions on tests and quizzes in order that students become familiar with this type of question;"

While these are certainly not the only learning activities these schools offer, these proposed "strategies" suggest that, for many schools, "improving student achievement" has become synonymous with "raising standardized test scores."

Chapter 1 in Boston: Misunderstanding the Mandate

As we have noted, recent revisions of federal Chapter 1 regulations create an unprecedented opportunity for school reform in schools enrolling large numbers of poor children. In Boston, 94 of 117 schools receive Chapter 1 funds and are in a position to take advantage of these new amendments. Indeed, in its 1989-92 project application, Boston's Office of Chapter 1 Programs recognizes this opportunity and asserts that "it is the intention of the Boston Chapter 1 program to derive the maximum benefit from the new law for our students."¹⁷

However, the substance of Boston's application falls far short of its rhetoric. Specifically, the program persists in an overreliance on pullout approaches and pays little more than passing attention to promising alternative methods of service delivery. Moreover, the limited scope of many of the schoolwide projects currently being implemented and the failure to articulate a vision for Boston's Chapter 1 program that includes a statement of its desired outcomes in terms of the "basic and more advanced skills that all children are expected to master" suggests that Boston is not committed to the significant educational reform which the new law makes possible.

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In this first year of the new three-year planning cycle, Boston's Chapter 1 program emphasizes three components. First, the "Innovative Programs" component of Chapter 1 is envisioned as an effort to provide "training for 'changing schools.'" According to the project application, a Schools in Transition Institute in collaboration with nearby colleges and universities will provide training for zone and school administrators, teachers, paraprofessionals, and parents in Chapter 1 program and school restructuring. While a promising idea, the failure of training to be school-specific or located at the school site curtails its effectiveness.

Second, thirteen Boston elementary schools are initiating schoolwide projects designed by parents and staff at each school. Many of these programs include among their goals the reduction of the pupil to teacher ratio through the use of Chapter 1 staff in the regular school program and the reduction of retentions in the first grade. Other goals of schoolwide projects include:

- Reducing pullouts and special education referrals (Agassiz and Manning Schools);
- More effective mainstreaming (Blackstone and Manning Schools);
- Integrating reading into the whole school curriculum (Blackstone and Manning Schools);
- Reducing the emphasis on worksheets and introducing more varied and stimulating learning materials (Condon School);
- Emphasizing problem-solving and analytical skills as well as "the basics" (Dickerman School);
- Expanding counseling and support services for students and families (Dickerman School);
- Offering skill development and literacy classes for parents (Dickerman School);
- Using neighborhood parent home-workers as school-family liaisons (Greenwood School);
- Implementing an extended-day kindergarten (Holland School);
- Strengthening the connection between the library program and the regular curriculum (Kennedy School); and
- Increasing the mainstreaming and integration of bilingual and LEP students (Murphy and Tobin Schools).

Although many of these programs include promising features and important and worthy goals, most are not particularly comprehensive. In this respect, Boston's schoolwide programs mirror most of those reviewed in a recent national study.

Unfortunately, although many of these programs include promising features and important and worthy goals, most are not particularly comprehensive.¹⁸ In this respect, Boston's schoolwide programs mirror most of those reviewed in a recent national study. Indeed, as the National Assessment of Chapter 1 in 1987 noted of most schoolwide projects, many of the projects in Boston:

aim at singular aspects of school and as a result fail to capture the breadth of efforts characteristic of schools that are effectively serving poor students. These effective schools emphasize the establishment of clear goals, high expectations, and planning efforts that engage the entire school staff....The efforts of these schools that succeed in improving student achievement have a wider scope than *just* a reduction in class size or the introduction of a new reading program.¹⁹

Moreover, under the guise of schoolwide reform, some proposed "innovations" actually reinforce potentially harmful grouping practices and emphasize only the "remediation" of student "deficits." For example, the Holland School has proposed two separate first grade classes — a "preparatory" first grade class and a "basic skills" class — in addition to the "regular" first grades. Meanwhile, the P. A. Shaw School is introducing "remedial workshops" for students labeled "at risk." And while the Winship School has proposed a new ESL class to "bridge the gap" between LEP and regular program students, its project description provides no mention of any attempt to increase the integration of the two programs at the school.

Ironically, Boston's Chapter 1 project application alludes to models of schoolwide programs that are significantly more comprehensive than those currently being implemented and which could institutionalize alternative instructional or organizational practices. For example, both the High Intensity Skills Development model and the Two-Year Reading Program model, both Chapter 1-approved approaches, rely on teams consisting of four classroom teachers, a Chapter 1 teacher, a paraprofessional, and a team leader to work with heterogeneous groups of approximately 100 students. These clusters utilize team planning, team teaching, and ad hoc grouping, with all teachers coming to assume responsibility for all students on their team. Team-developed themes are used to integrate the curriculum, while instructional strategies include individual tutoring, small and large group instruction, peer tutoring, and cooperative group learning. Unfortunately, none of Boston's schools chose to implement either approach this year.

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Despite 15 different program options listed in "Regular Chapter 1 Choices" for schools not implementing schoolwide projects and the Chapter 1 grant application's assertion that "the goal of the program is to enable Chapter 1 students to succeed academically in regular classrooms," most of Boston's schools — 41 of 63 elementary schools and 10 of 11 high schools — have chosen to continue their use of the traditional pullout model.

Finally, despite 15 different program options listed in "Regular Chapter 1 Choices" for schools not implementing schoolwide projects and the Chapter 1 grant application's assertion that "the goal of the program is to enable Chapter 1 students to succeed academically in regular classrooms," most of Boston's schools — 41 of 63 elementary schools and 10 of 11 high schools — have chosen to continue their use of the traditional pullout model.²⁰ And while pullout approaches could include attention to developing problem-solving, reasoning, or analytical skills, in Boston this does not seem to be the case. For example, not one school in Boston has opted to implement the promising, research-supported Higher Order Thinking Skills (HOTS) model. More leadership, information, training, and technical assistance clearly are needed before more schools will be willing to adopt innovative alternative methods of Chapter 1 delivery.

Perhaps most importantly, despite the new Chapter 1 law's recent amendments stipulating that Chapter 1 students be subject to the same expectations and challenges as more advanced students, many of the options Boston proposes for Chapter 1 service delivery simply do not comply with this provision. For example, the avowed purpose of the "Learned and Tested Learning Lab" is to teach students "life skills such as following directions, completing job applications, and obtaining an automobile license," while the Chapter 1 High School reading program is intended to provide "survival skill lessons," and has as its goal "improvement in basic reading skills."²¹ These goals clearly represent no more than the least common denominator on the range of expectations for all students.

Rather than articulating the goals of Boston's Chapter 1 program in terms of the "basic and more advanced skills that all children are expected to master," as called for under the new law, Boston's 1989-92 program application consistently describes its "performance objectives" at all levels in limited and vague terms, such as "instruction aimed at improving basic [reading and mathematics] skills."²² Such objectives do not specify competencies Chapter 1 students should master. Indeed, they avoid altogether articulating the advanced skills students are expected to acquire.

Unfortunately, Boston has failed to achieve its goal of "deriv[ing] the maximum benefit from the new [Chapter 1] law for [its] students." In fact, Boston has flagrantly disregarded what is perhaps the most critical provision of the new law, that Chapter 1 students be subject to the same expectations and helped to achieve the same goals as other students. If Boston truly intends to make reforms to improve the education of all its students, it must seize the opportunity provided by the new Chapter 1 law, broaden its vision of "basic skills" to include critical thinking skills, and accept the challenge to improve Chapter 1 programs and the schools housing them.

A System at Odds with Itself

Education policy and practice in Boston Public Schools presents a portrait of a system at odds with itself. In some schools, teachers and principals have adopted practices that reflect the best that urban public schools anywhere have to offer. These practices define diverse groups of students in terms of their strengths, engage them in a challenging, high-interest curriculum, and provide them with opportunities to develop a wide range of skills in areas frequently considered appropriate for only a few students.

But these efforts have emerged within a policy context that directly contradicts their purpose. Specifically, Boston Public Schools' emphasis on "readiness" and "basics first" has the effect of increasing the sorting, labeling, and tracking of students on the basis of their differences, and is likely to further exacerbate disparities and depress achievement. This situation, in our view, reflects Boston's schools' lack of a vision compelling enough to mobilize the energies and resources of diverse constituencies on behalf of all Boston students and consistent with traditional ideals of a democratic society. In the absence of such a vision, programs and policies develop without any sense of coherence. In the absence of such a vision, Boston schools flounder without purpose, wasting the intellectual and human potential of children and staff alike.

Boston is a system that cries out for de-tracking. As we have noted, this process entails more than the simple regrouping of students. It also requires new curricula and teaching approaches, intensive support for teachers, new modes of assessment, and a review of all district policies underlying current grouping practices. But above all, de-tracking requires leadership and the support from the highest levels for changes that must happen in every school and classroom. As long as the current policies prevail, it is unlikely that school-based de-tracking efforts can be initiated or sustained.

In some schools, teachers and principals have adopted practices that reflect the best that urban public schools anywhere have to offer. But de-tracking requires leadership and the support from the highest levels for changes that must happen in every school and classroom.

School Reform: Cosmetic or Real?

A growing consensus has emerged that the educational reforms of the past several years — in Boston and nationwide — have been "purely cosmetic."²³ Informed by the lofty rhetoric of "academic excellence" and "high standards," these reforms have done little to alter instructional strategies, school organization, or student learning. Many of these reforms have been politically expedient, to be sure. For school officials trying to appease public concern about low standards, more testing and more student retentions appear to convey the message that standards are being upheld. Moreover, the appearance of improvement is relatively easy to achieve: test scores can be raised by teaching to the test and referring more students to special education; and retaining increasing numbers of students conveys an impression of accountability to standards.

The second wave of educational reform must now address the much more difficult, but much more potentially promising, reform of the process of schooling itself. In this stage of reform, it is essential that Boston tackle the ability grouping and tracking practices this report has described as harmful and unnecessary. Any effort toward restructuring schools that does not explicitly confront these practices and the assumptions that justify their use, will, like previous efforts, fail to live up to its own promises.

However, these superficial "reforms" may serve to deflect emphasis from the structures within schools that undermine student achievement and erode the school community. Indeed:

Amid this blizzard of reform activity, it is easy to lose sight of the goal of reform: improving the quality of schooling in America. Reform can easily become its own cause because enacting reforms is easier than improving student performance....The most important lesson from school reform efforts is that we need a new theory of institutional reform. This new theory proposes that reform must focus on improving the health and the competence of schools as organizations.²⁴

Perhaps Boston can learn from the false starts of the most recent reform movement locally and nationwide. While the first wave of reform tried to change "student outcomes" without changing school practices, the second wave of educational reform must now address the much more difficult, but much more potentially promising, reform of the process of schooling itself. In this stage of reform, it is essential that Boston tackle the ability grouping and tracking practices this report has described as harmful and unnecessary. Any effort toward restructuring schools that does not explicitly confront these practices and the assumptions that justify their use, will, like previous efforts, fail to live up to its own promises.

PHOTO: BEATRIZ STROHMEYER



10

Recommendations

"Leadership is crucial. Community support is also essential. Without a concerted effort from 'the top' and 'the bottom,' Boston schools may change in superficial ways, but the experiences of Boston students inside the schools are likely to remain much the same."

The picture of Boston schools portrayed in this report makes it unequivocally clear that Boston's tracking and placement practices, both across the district and within schools, erode the achievement of most students and circumscribe attempts to create schools that are cohesive and supportive communities of learners. By treating individual differences as grounds for providing separate and unequal education programs, these practices institutionalize inequality in Boston schools.

The process of de-tracking must be built into all restructuring and reform efforts in Boston schools. Change will require sustained commitment and a focused, multi-year effort. Indeed, knowledgeable practitioners and researchers suggest that restructuring of schools is likely to require a continuing effort of five, ten, or more years before gains are apparent.

The process of de-tracking must be built into all restructuring and reform efforts in Boston schools. Given that instructional grouping is intertwined with nearly every other aspect of school life, change will require sustained commitment and a focused, multi-year effort. A quick-fix approach would be unrealistic and irresponsible. Indeed, knowledgeable practitioners and researchers suggest that restructuring of schools is likely to require a continuing effort of five, ten, or more years before gains are apparent in improved teaching and school organization.¹

These recommendations include both a set of general implementation guidelines for restructuring and more specific recommendations directed toward particular actors. Because of the complex nature of the reforms we propose, we envision a long-term, multi-strategic effort on the part of all parties involved in educating Boston's children.

General Implementation Guidelines

1. Plans for school restructuring should include focused attention to de-tracking and the reform of student grouping and placement practices with the goal of reducing the isolation of certain groups of students, promoting diversity, extending state-of-the-art practices to all students, and strengthening the school as a community.
2. Restructuring should be consciously and purposefully grounded in research, incorporating practices documented effective and rejecting practices which research has found harmful and ineffective.
3. Restructuring should be implemented on a school-by-school basis beginning with elementary schools and ultimately extending through high schools.
4. Restructuring should proceed systematically but thoughtfully; administrators, school staff and parents must be provided with time to research, discuss, reflect on, plan, and experiment with proposals for change.
5. School-based restructuring teams should have access to central and zone office support and technical assistance that is process-oriented, research-based, and able to provide information about state-of-the-art practices.
6. Restructuring efforts should include parents and representatives from community-based organizations.
7. Restructuring should provide extra support for students who have a history of school failure or are otherwise vulnerable by redirecting resources to support these students in the mainstream.
8. Restructuring should broaden the curriculum to ensure that standards requiring an arbitrary level of conventional basic skills mastery do not lock students out of opportunities to learn higher order thinking skills and access to high status knowledge; curriculum should balance a focus on low-order skills with a focus on thematic content and should redefine "basic skills" to include logical reasoning and analysis, problem-solving, and creative thinking — skills which can and must be learned by all students in order to ensure their full citizenship in a democratic society.
9. Restructuring should build in mechanisms for the smooth transition of students between educational levels — from elementary to middle school, and from middle to high school.
10. Restructuring should include both zonewide and school-based staff development focused on instructional and curricular strategies successful with heterogeneous classes.
11. Restructuring should include rescheduling and an extended-year option for teachers with appropriate compensation, allowing them to plan and co-teach together.
12. Restructuring and de-tracking plans should allow for some flexible skill-specific grouping focused on reducing skill disparities among students.

Recommendations for Action

While these general guidelines apply at all levels, we also recommend the following specific steps for particular actors:

The Boston Public School Committee and Superintendent

The Boston Public School Committee and Superintendent must create a favorable districtwide climate for de-tracking and articulate a vision for whole-school restructuring that includes the elimination of grouping by ability. We recommend that Boston school officials:

Provide Educational Leadership

1. The Boston School Committee should convene a broad-based task force on tracking in Boston and develop a systemwide policy encompassing fundamental goals for restructuring Boston's schools to reduce isolation of specific student groups, embrace differences as diversity rather than deficit, and extend the most effective curriculum and instructional practices to all students. Such a policy is essential to establish an overall vision and context within which school-based restructuring can occur.
2. The Boston School Committee and Superintendent should revise policies that represent barriers to de-tracking and:
 - A. Require every school-based management plan within three years to include provisions for de-tracking and within five years to implement those plans.
 - B. Disconnect promotion decisions from standardized test scores and implement alternatives to non-promotion such as multi-age groupings and competency-based curricula; eliminate the comparison of test scores across schools; recognize the limitations and misuses of current assessment measures and develop more thoughtful means of assessing student progress including developmental report cards through sixth grade.
 - C. Abandon curriculum guidelines that depend on a false hierarchy of basic skills. Fulfill the promise of the Boston Education Plan to emphasize "creative problem-solving strategies" and "higher-order/critical thinking" and to ensure "that a basic college preparatory sequence is available to all students and all students acquire the skills and knowledge needed to have a choice between employment and higher education."²
 - D. Decentralize responsibility for curriculum development to the schools within a set of guidelines that promote innovative teaching, intergroup awareness, "advanced" skills, and thematic curricular approaches.
3. The Superintendent should make annual reports to the school committee, parents' organizations, and the public regarding course offerings in each school, and the percentages of enrollment by race and grade in the different English and mathematics courses at each middle and high school.

The Boston Public School Committee and Superintendent must create a favorable districtwide climate for de-tracking and articulate a vision for whole-school restructuring that includes the elimination of grouping by ability.

4. The Superintendent should take immediate steps to inform parents and school staff about changes in the Chapter 1 law and to revise Boston's Chapter 1 program to reduce the reliance on pull-out approaches and ensure that schoolwide projects do not result in new forms of tracking. All schools should receive technical assistance and encouragement to adopt the most promising Chapter 1 models offered.
5. The Superintendent should encourage alternatives to basic skills remediation at all levels and redirect resources currently used for "remediation to the test" toward accelerated learning, cooperative learning, and higher-order thinking skills curriculum and instruction.
6. The Superintendent should prepare a multi-year timetable for de-tracking that reflects a commitment to the fundamental principles for restructuring and the implementation guidelines. The timetable should begin in the elementary grades and ultimately extend through the high school level, and should include an assessment of how current funding can be redirected toward the de-tracking process.

The Superintendent should prepare a multi-year timetable for de-tracking that reflects a commitment to the fundamental principles for restructuring and the implementation guidelines. The timetable should begin in the elementary grades and ultimately extend through the high school level, and should include an assessment of how current funding can be redirected toward the de-tracking process.

Promote Elementary School and Middle School De-Tracking

As part of a school-based management plan or otherwise, every elementary and middle school should be required to establish a 3-year timetable to:

1. Prepare all elementary schools to offer all students the teaching and curriculum advantages currently offered to "advanced" students, including smaller class size, continuity of teaching staff over several years, varied curriculum activities, and access to library resources; phase out Advanced Work Classes within three years; and eliminate practices that publicly label students by assigning them to separate classes or pull-out programs.
2. Improve and de-track all middle schools by implementing heterogeneous clusters, team teaching, interdisciplinary curriculum, cooperative learning, and higher order thinking skills for all students in all middle schools, and introducing accelerated learning to ensure that all students will be taught on grade level.
3. Develop a plan to strengthen the transition of students from Grade 8 to Grade 9 emphasizing timely assignment of students to high schools, intensive acceleration for students with low-performance levels, and regular communication between high schools and middle schools.
4. Develop a plan to phase out grades seven and eight in Boston Latin School and Boston Latin Academy within five years.

Every high school should be required to redesign the educational program to eliminate "Basic" level courses and equalize the instructional starting point for students; and ensure that all students have access to high status knowledge and effective instruction.

Promote High School De-Tracking

As part of a school-based management plan or otherwise, every high school should be required to establish a 5-year timetable to:

1. Restructure its grouping, curriculum, and instructional practices to promote schools as communities of learners with equal access to knowledge; this might include subdividing large high schools into smaller, heterogeneous units, beginning with the ninth grade.
2. Strengthen the academic preparation of all students in all high schools to expand their options for post-secondary opportunities in higher education or the world of work. This will require schools to redesign the educational program to eliminate "Basic" level courses and equalize the instructional starting point for students; ensure that all students have access to high status knowledge and effective instruction; provide vulnerable ninth grade students with extra support in the regular school setting in the regular school day in mixed-ability classes; implement intensive acceleration strategies to bring all students up to the level at which they can participate effectively in regular grade-level courses.
3. Develop a 3-5 year plan to restructure Boston Latin School, Boston Latin Academy, and Boston Technical School as high schools for diverse groups of students, including appropriate proportions of students requiring special education or bilingual classes; provide professional development to teachers at these schools to support them in teaching a diverse student population; include these schools in Boston's parent choice plan with student assignment subject to high school assignment procedures rather than examination scores.
4. Offer a challenging core curriculum to all students through tenth grade. This need not result in every school offering the *same* curriculum, but course offerings should be equivalent in terms of type of knowledge taught and should include high status knowledge. In upper grades, "Honors" sections should be available in every high school.
5. Review Boston's plan for theme schools, including admissions, plans for dissemination of program information, procedures, and provisions for inclusion of special education and bilingual students to ensure that Boston's theme school plan does not result in further districtwide stratification.

Create a Purposeful, Systemwide Professional Development Plan

1. Incorporate into a systemwide strategy for professional development the preparation of teachers to implement approaches effective with heterogeneous groups (including cooperative learning, consulting teacher and co-teacher models, accelerated learning, and the teaching of higher order thinking skills) and the preparation of principals to lead school-based de-tracking efforts. Such an effort should include opportunities for all staff to visit de-tracked schools.
2. Restructure guidance resources in Boston Public Schools to ensure that all Boston students have regular opportunities to acquire information about and discuss future life options and to relate their interests to their program of study and educational choices.

School officials should incorporate into a systemwide strategy for professional development the preparation of teachers to implement approaches effective with heterogeneous groups and the preparation of principals to lead school-based de-tracking efforts.

Zone Superintendents

Zone Superintendents should establish a climate conducive to school de-tracking. Zone offices should take steps to:

Become Resource Centers for School De-Tracking

1. Work with the zone councils to disseminate research findings and literature about tracking and its alternatives to all principals, teachers, and parents.
2. Provide opportunities for school-based staff to discuss implications of school de-tracking.
3. Monitor resource allocation to ensure equity in staff and materials from school to school.
4. Provide technical assistance, guidelines, and materials to school-based teams charged with planning for and facilitating de-tracking.
5. Coordinate in-service staff development around themes related to de-tracking.
6. Identify model practices at elementary, middle, and high school levels and provide information about these practices and opportunities for observation to school staff, parents, and members of the zone councils.

Document De-Tracking in Boston

1. Prepare videotaped and written materials documenting de-tracking in one elementary and one middle school in the East, West, and North zones.
2. Prepare similar materials documenting de-tracking in selective and district high schools.

Every Boston Public School

Every Boston public school should create a plan for school-based restructuring and de-tracking to reduce the isolation of groups of students, promote diversity, and extend the best school practices to all schools.

Years One–Two: School Assessment and Planning

Every Boston public school should create a plan for school-based restructuring and de-tracking to reduce the isolation of groups of students, promote diversity, and extend the best school practices to all schools.

1. Use the school-site planning team of staff and parents to discuss and assess current tracking and ability grouping practices in each school.
2. Provide research about tracking and its alternatives to all staff and parents through workshops, written materials, and opportunities for out-of-school visits.
3. Conduct a schoolwide "expectations audit" to assess strengths and needed improvements in school routines.
4. Revise the statement of school mission to reflect a commitment to providing the "best practices" to all students in accordance with the fundamental principles of de-tracking.
5. Identify school staff who have expertise in such strategies as cooperative learning, mainstreaming, and multi-cultural education and provide opportunities for staff to share their expertise with other staff and parents.
6. Identify the most promising curricular and instructional approaches already existing in each school and develop a plan to extend these to all students.

Years Two–Three: Implement Alternative Practices and Pilot Programs

1. Introduce alternatives to non-promotion including mixed-age and multigrade clusters to allow students to stay with the same teachers for several years.
2. Introduce voluntary heterogeneous clusters in the earliest two grades in half of each school. In schools with bilingual classes, introduce two-way projects. Pair teachers experienced in working with mixed-ability groups, cooperative learning, and experiential curriculum with less-experienced teachers.
3. Pilot thematic curriculum and cooperative learning strategies in half the clusters in the earliest two grades of the school.
4. After each year, assess achievements and difficulties of school-based plans through schoolwide faculty and parent meetings and adjust efforts accordingly.

Years Four–Six: Expanding Successes Schoolwide

1. Extend the heterogeneous clusters to all children in the earliest two grades, repeating the change process in the remaining grades.
2. Prepare a case study/history of each school's restructuring process to circulate to other schools and districts.

Parents and Community Organizations

Parents organizations operating citywide in Boston — including the Citywide Parents Council, Citywide Education Coalition, Special Education Parents Advisory Council, Bilingual Master PAC and others — should:

Promote Community Support for De-Tracking

1. Parent groups should collaborate with community-based organizations in every neighborhood in outreach and education efforts to inform parents in their home language about tracking and placement practices in Boston schools.
2. Parent groups should coordinate a broad-based education strategy to promote changes in districtwide policy and school level practice.
3. Identify and train a core group of parents and community-based advocates to represent individual students who want to up-grade their course or track placement.

The Mayor's Office

The Mayor's Office should provide visible support for restructuring schools through de-tracking:

Provide Concrete Support and Political Leverage

1. The Mayor should provide budgetary support to parent and community organizations specifically to sponsor school-based and community-based education activities and individual advocacy efforts.
2. The Mayor should put \$6 million in a reserve account with \$50,000 for each school, to be released to the School Department specifically when schools begin a school-based de-tracking process. Half of these funds should be provided for planning, with the remainder released upon completion of a plan that embodies the fundamental principles for restructuring and shows concrete steps schools will take to eliminate ability grouping and tracking practices.

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The Massachusetts Department of Education

The Massachusetts Department of Education must create a statewide climate conducive to de-tracking. The Department must:

Provide Educational Leadership

1. Recognize that problems of tracking and placement are not limited to Boston and circulate widely a state policy position on tracking to all superintendents, school committees, principals, teachers, parent organizations, media, and others concerned about education in Massachusetts.

The Massachusetts Department of Education should promote the use of Chapter 1 funds — approximately \$17 million in Boston — to restructure schools rather than fund ineffective pull-out approaches; provide technical assistance to schools to eliminate grouping and tracking practices shown to undermine the progress of Chapter 1 students; and disseminate detailed information about approved Chapter 1 alternatives to pull-out remedial models.

Monitor Tracking and Placement Practices

1. Expand data collection to require all middle level and high schools to report data on tracking — including data on instructional starting points in Grade 9 — by race, gender, and special education or bilingual program status, and issue regular reports on tracking practices statewide by district and by high school.
2. Issue regular reports on non-promotion patterns statewide by race, grade, and special education or bilingual status for each district and school.
3. Identify and recognize model de-tracked schools statewide and publicize promising curriculum and instruction practices in those schools. Disseminate descriptions of these models through statewide conferences, regional meetings, and written materials designed to reach school-level staff, administrators, school committees, parents, and the media.
4. Rigorously monitor Chapter 1 programs in Boston, especially in regard to expectations for the teaching of critical thinking, reasoning, problem-solving, and other “advanced” skills to all students and the coordination of Chapter 1 with the regular program; promote the use of Chapter 1 funds — approximately \$17 million in Boston — to restructure schools rather than fund ineffective pull-out approaches; provide technical assistance to schools to eliminate grouping and tracking practices shown to undermine the progress of Chapter 1 students; and disseminate detailed information about approved Chapter 1 alternatives to pull-out remedial models.

Reward De-Tracking Efforts

1. Build incentives for de-tracking into all grant-making programs of the Department including Chapter 188 remedial and dropout prevention grants, equal educational opportunity grants, the Carnegie Schools program, and School Improvement Councils.
2. Build incentives for greater integration of special education and bilingual students into a de-tracked mainstream through such mechanisms as statewide plans, program audits, and technical assistance to Parent Advisory Councils and school districts.

Promote Professional Development

1. Give preference in the awarding of Horace Mann Grants to teachers developing or employing effective instructional strategies for heterogeneous groups which expand access to knowledge to all students.
2. Identify, describe, and disseminate information about model professional development approaches providing staff training for whole-school restructuring and de-tracking.

Clearly restructuring efforts that include de-tracking require broad support and a willingness to act on the part of all constituencies of Boston schools. Leadership is crucial. Community support is also essential. Without a concerted effort from “the top” and “the bottom,” Boston schools may change in superficial ways, but the experiences of Boston students inside the schools are likely to remain much the same. We hope few will find this an acceptable alternative to real restructuring of the schools.

Chapter 1: Introduction

1. For example, Boston's grade promotion policy trumpets a single set of standards to "bring about more equitable treatment of students citywide." See Boston School Committee, *Student Promotion Policy*, 1983, p. 1. Centralized curriculum objectives have been tied to standardized tests designed to measure students' mastery of skills considered necessary for success in the next grade. The adoption of a single basal reading series, proposals for a single math textbook series, and a requirement that all students take four years of high school mathematics including algebra prior to graduation have further attempted to standardize school experiences for all students.

2. For a variety of reasons, this report does not review the status of a fourth subsystem, vocational education. A number of recent reports have outlined the second class status of vocational education in Boston, noting the overrepresentation of African-American students in this track. Many features of vocational education in Boston work to isolate students from the high school mainstream. We have chosen in this report to focus on placement practices that begin prior to high school. Readers who are especially interested in vocational education in Boston are referred to "Executive Summary, Boston: Chapter 74 Evaluation," Massachusetts Department of Education, Greater Boston Regional Education Center, February 1989; "Staff Report for the Improvement of Vocational/Technical Education in the City of Boston," Boston Employment Commission, December 1988; and "Policy Paper on Vocational Education," Mayor's Education Advisory and Policy Office, City of Boston, October 17, 1989.

3. See Chapter 5 of this report for a detailed summary of research related to ability grouping and tracking.

4. For example, year after year, Boston's standardized reading test scores show differential results between white and African-American and Hispanic students, differences that grow wider with each passing grade. Moreover, as African-American and Hispanic students progress through their schooling, more and more fall into the lower percentiles. While test scores have limited capacity to describe a school system's performance, this persistent pattern is significant and cannot be ignored. See Massachusetts Advocacy Center, "The Way Out: Test Score Patterns and Reading in Boston Public Schools," Status Report, September 1988.

5. Because placement rates inevitably reflect some overlap, this report can only estimate the shrinking population of students belonging only to the mainstream. However, the overlap in formal placements, at least until a vocational education option is introduced in the ninth grade, is minimal. For example, in 1985-86, only 0.2 percent of all students were in bilingual (Spanish) Advanced Work Classes, and only 2.0 percent were enrolled in bilingual special education. In addition to accounting for placement in special education, bilingual education, and Advanced Work Classes, our estimate reflects the placement of students set apart from their peers because of non-promotion, which may happen apart from or in addition to another placement practice.

6. Ruth Mitchell, Kati Haycock, and M. Susana Navarro, "Off the Tracks," *Perspective 1* (3), Council for Basic Education, Summer 1989, p. 16.

7. John I. Goodlad and Jeannie Oakes, "We Must Offer Equal Access to Knowledge," *Educational Leadership*, February 1988, p. 19.

8. Henry Giroux and Peter McLaren, "Teacher Education and the Politics of Engagement: The Case for Democratic Schooling," *Harvard Education Review* 56 (3), 1986, p. 8.

Chapter 2: Boston's Academic Mainstream: Grouping Practices and Their Consequences

1. See Massachusetts Advocacy Center, "The Way Out: Patterns of Non-Promotion in Boston Public Schools (1985-87)," January 1988 and Massachusetts Advocacy Center, Memorandum to Persons Concerned About Achievement and Dropout Patterns in Boston, Re: Non-Promotion and Dropout Data: 1986-87, 1987-88, March 8, 1989. This pattern has persisted since 1984. See also Rudolph F. Crew, Boston Public Schools, Memorandum to Laval S. Wilson, Re: Grade One Non-Promotes, October 1, 1986.
2. Janet Rose, *et al.*, "A Fresh Look at the Retention-Promotion Controversy," *Journal of School Psychology* 21, 1983.
3. Mary Lee Smith and Lorrie A. Shepard, "What Doesn't Work: Explaining Policies of Retention in the Early Grades," *Phi Delta Kappan*, October 1987.
4. C.T. Holmes, "The Fourth R: Retention," *Journal of Research and Development in Education* 17 (1), 1983.
5. Rose, *et al.*
6. Mary Lee Smith and Lorrie A. Shepard, "Flunking Grades: A Recapitulation," in *Flunking Grades: Research and Policies on Retention*, in Smith and Shepard, eds., New York: Falmer Press, 1989. See also Mary Ann Rafoth, Peg Dawson, and Karen Carey, "Supporting Paper on Retention," Communique, National Association of School Psychologists, December 1988.
7. Smith and Shepard, 1989, p. 220.
8. D. Byrnes and K. Yanamoto, "Grade Repetition: Views of Parents, Teachers, and Principals," Logan, UT, Utah State School of Education, 1984. See also K. Yanamoto, "Children's Ratings of the Stressfulness of Experiences," *Developmental Psychology* 15, 1979.
9. John I. Goodlad, *A Place Called School: Prospects for the Future*, New York, McGraw-Hill, 1984, p. 166.
10. Smith and Shepard, 1989, p. 225.
11. See Chapter 5 of this report for an extensive review of the research literature on ability grouping and tracking.
12. Robert E. Slavin, "Ability Grouping and Its Alternatives: Must We Track?" *American Educator*, Summer 1987. One example of such regrouping, known as the Joplin Plan, is frequently used for reading instruction in elementary schools. See also Thomas L. Good and Jere E. Brophy, *Looking in Classrooms*, New York: Harper and Row, 1987, p. 413; and Adria Steinberg, "First Grade Reading: Who Learns and Who Doesn't?" *Harvard Education Letter* 3 (1), January 1987.
13. Goodlad, p. 141.
14. *Ibid.*
15. Beth E. VanFossen, James D. Jones, and Joan Z. Spade, "Curriculum Tracking and Status Maintenance (excerpts)," *Sociology of Education*, April 1987.
16. See Massachusetts Advocacy Center, "The Way Out: Test Score Patterns and Reading in Boston Public Schools," for a more detailed discussion of reading activities in "regular" and remedial classes in Boston.
17. The allocation of seats in Advanced Work Classes has been the subject of specific court orders in Boston's desegregation case *Morgan v. O'Reilly*. Originally adopted to reflect a combined Hispanic and Asian enrollment of less than 10% in 1973, the category "other minority" may be outdated in 1989 when Boston's combined Hispanic and Asian enrollment is 25%. Moreover, because Asian students tend to outscore Hispanic students on standardized tests, disproportionately low numbers of Hispanic students gain admission into Advanced Work Classes. This underrepresentation is not redressed by the numbers of Hispanic students assigned to the few bilingual AWCs. Thus, in 1987-88, only 124 (5.3%) of all Hispanic students in Grades 4, 5, and 6 were enrolled in Advanced Work Classes compared to 177 (19.0%) Asian students, 268 (10.9%) white students, and 481 (8.3%) African-American students in those grades. See *School Profiles, 1987-1988*, Boston Public Schools, p. 3.

18. For recent critiques of the use of standardized test scores for "high stakes" decision-making see: Ron Brandt, "On Misuse of Testing: A Conversation with George Madaus," *Educational Leadership*, April 1989; Samuel J. Meisels, "High-Stakes Testing in Kindergarten," *Educational Leadership*, April 1989; Vito Perrone, *Working Papers: Reflections on Teachers, Schools, and Communities*, New York: Teachers College Press, 1989. See also Chapter 9 of this report for a more extensive discussion of the use of standardized testing in Boston.

19. See the National Association for the Education of Young Children, "NAEYC Position Statement on Standardized Testing of Young Children 3 through 8 Years of Age," *Young Children*, March 1988, pp. 42-47.

20. Elly B. Pardo and Joanne Russell, "Standardized Tests at The Early Childhood Level: Do They Tell Us The Truth About Children?," Paper delivered at the annual meeting of the American Educational Research Association, San Francisco, CA, March 1989, published in *1989 Symposia*, Robert Zionek and Peter Wolmut, eds., Cedar Rapids Public Schools, October 1989.

21. Mara Sapon-Shevin, "Giftedness as a Social Construct," *Teachers College Record* 89 (1), Fall 1987, p. 45.

22. Michelle Fine, "Expert Testimony for Englewood School District Case," June 1987.

23. See Sapon-Shevin, pp. 39-53.

24. Sapon-Shevin, p. 43.

25. *Brown et al. v. Board of Education of Topeka, Kansas et al.*, 347 U.S. 5 (1954), p. 493.

26. *Barriers to Excellence: Our Children At Risk*, Boston: National Coalition of Advocates for Students, 1985, p. 44.

27. See Chapter 3 and 4 of this report for a detailed discussion of the relationship of special education and bilingual education to Boston's mainstream.

28. Janet Eyer, Valerie J. Cook, and Leslie E. Ward, "Resegregation: Segregation Within Desegregated Schools," in Christine H. Rossell and Willis D. Hawley, eds., *The Consequences of School Desegregation*, Philadelphia: Temple University Press, 1983, p. 130.

29. Non-promotion at the middle level may repeat an elementary level failure or even constitute grade failure for the second consecutive year. Indeed, of all students held back in sixth, seventh, or eighth grades in 1987, 11% were already repeating the grade in which they would be retained the following year. Moreover, a review of student birthdates by grade for the 1984-85 school year found that 1,137 middle school students — 11% of all middle school students in Boston — were two years or more behind their age-appropriate grade. See Massachusetts Advocacy Center, *The Way Out: Student Exclusion Practices in Boston Middle Schools, 1986*, and Massachusetts Advocacy Center, "The Way Out: Patterns of Non-Promotion in Boston Public Schools (1985-87)," *Status Report*, January 1988.

30. For a detailed description of policies and practices that characterize Boston middle schools see Massachusetts Advocacy Center, *The Way Out: Student Exclusion Practices in Boston Middle Schools, 1986*.

31. Approximately one-quarter of examination schools seats in seventh grade go to approximately five percent of Boston's sixth graders, while the remaining sixth graders compete for another quarter of exam school places. The second half of seventh grade exam school seats go to students attending sixth grade outside Boston Public Schools. In 1985-86, 426 students were enrolled in sixth grade Advanced Work Classes in Boston. Of these, 203 (47.7%) enrolled in seventh grade in either Boston Latin School or Boston Latin Academy the following year, 182 (42.7%) were enrolled elsewhere in Boston, while 42 (10.3%) transferred from Boston Public Schools. In the spring of 1986, 777 students received invitations to enroll in one of the Latin Schools. Of these, 407 were from Boston Public Schools. Similar proportions are reflected in admission data for subsequent years.

32. RECAP is a catch-up program for middle school students who are overage for grade and have poor attendance records.

33. Robert E. Slavin, "Ability Grouping and Its Alternatives," *American Educator*, Summer 1987.

34. Ironically, while instruction in a foreign language is generally restricted to high-group English-speaking students, former bilingual students who already speak two languages are typically placed in the low-group clusters when they are mainstreamed.

35. Richard deLone, *Small Futures: Children, Inequality, and the Limits of Liberal Reform*, New York: Harcourt Brace Jovanovich, 1979, p. 111.

36. Several researchers have suggested that African-American students may be especially vulnerable to "rumors of inferiority" which result in their retreat from intellectually competitive settings. See, for example, Ray Hammond and Jeffrey P. Howard, "Doing What's Expected of You: The Roots and the Rise of the Dropout Culture," *Metropolitan Education* (2), Fall 1986, and Signithia Fordham and John Ogbu, "Black Students' School Success: Coping with the 'Burden of 'Acting White,'" *The Urban Review* 18 (3), 1986.

37. Yohel Camayd-Frexias, "Public Education in Boston: A Social Policy Challenge," October 1988.

38. Boston Public Schools, *Guidance and Support Team Services*, "Middle School Guidance Counselor: Position Description."

39. Committee on Policy for Racial Justice, *Visions of a Better Way: A Black Appraisal of Public Schooling*, Washington, DC: Joint Center for Political Studies, 1989, p. 3.

40. Plans are currently underway in Boston to initiate a three-year algebra program in one middle school in each zone which will introduce mathematical knowledge to sixth graders so that they are prepared to take Algebra I in eighth grade in that middle school or in ninth grade in whatever high school they attend. A key component of the program is the professional development of teachers in the sixth grade. This effort is crucial to de-tracking in Boston Public Schools. Funded primarily from external sources, expansion and institutionalization of the program will require incorporation of the costs into the BPS budget. For a description of the Algebra Project's success in Cambridge, Massachusetts, see Joanne Ball, "A Volunteer Instills Math Literacy," *Boston Globe*, March 27, 1989.

41. Paul S. George, "Tracking and Ability Grouping: Which Way for the Middle School?" *Middle School Journal*, September 1988, p. 25.

42. George, p. 26.

43. For a summary of developmental characteristics of early adolescence see, for example, Gayle Dorman, Joan Lipsitz, and Pat Verner, "Improving Schools for Young Adolescents," *Educational Leadership*, March 1985.

44. Joan Lipsitz, *Successful Schools for Young Adolescents*, New Brunswick, NJ: Transaction Books, 1984, p. 11.

45. See Chapter 6, 7, and 8 for a detailed description of such practices.

46. In fact, relatively few students enter Boston Latin School or Latin Academy in ninth grade, most students having enrolled in these schools in seventh grade. Students enter Boston Tech primarily in ninth grade with a few more entering in tenth. Except for a few students, then, admission to Latin School and Latin Academy is virtually closed after seventh grade and to Boston Tech after ninth grade.

47. Admissions procedures for high schools other than examination schools are in the process of change. In the school year 1989-90, Madison Park was closed; the Umana School was closed and merged with Boston Tech under the name and selection procedures governing admission to Boston Tech; and English High and Jamaica Plain High were merged to form a new English High located at the site of the former Jamaica Plain High. Beginning in 1990-91, all non-examination high schools will become citywide schools admitting students under a new "parental choice" assignment plan. Students will be admitted by lottery according to procedures approved by the court and designed to prevent resegregation. Boston's examination schools, however, will continue to enroll students based on selective admission procedures.

48. Boston does not collect student data by income, and for a variety of reasons, Chapter 1 and school meal participation data do not suffice to reflect accurately socioeconomic status. To the extent that African-American and Hispanic families in Boston are more likely to be poor, high enrollment rates for these groups are also likely to reflect high enrollments of the poorest children in these schools, although this may vary according to the neighborhood in which students reside. For current information about poverty in Boston, see the Boston Foundation, *In the Midst of Plenty: A Profile of Boston and Its Poor*, Boston: the Boston Foundation, December, 1989. This report notes that the poverty rate for African-Americans is three times that of whites while that rate for Hispanics is six times that of whites (p. 27).

49. Jerold G. Bachman, et al., *Youth in Transition, Vol. III: Dropping Out — Problem or Symptom?*, Ann Arbor: Institute for Social Research, 1971, cited in Dale Mann, "Can We Help Dropouts: Thinking About the Undoable," *Teachers College Record* 87 (3), Spring 1986.

50. G. Alfred Hess, Jr., "Educational Triage in an Urban School Setting," *Metropolitan Education*, Fall 1986.

51. Leslie Horst and Maryellen Donahue, "Annual and Cohort Dropout Rates in Boston Public Schools: Focus on Programmatic and Demographic Characteristics," Boston Public Schools, Office of Research and Development, February 1989, p. 34.

52. Greg Byrne, "High School Dropouts in Boston," Paper submitted to the Department of Urban Studies and Planning, Massachusetts Institute of Technology, June 1988.

53. All data are cited in reports on dropouts prepared by Boston Public Schools, Office of Research and Development, May 1986; October 1986; and February 1989; and in a letter from the Office to the Massachusetts Advocacy Center, May 23, 1989.

54. Courses offered by a particular school seem to have little relation to the interests, backgrounds, or aspirations of the school's students. For example, some schools that might emphasize foreign language study because of a large bilingual enrollment offer the fewest language courses. At the same time, some examination schools with virtually no bilingual students place strong emphasis on foreign languages. Ironically, despite a rich foreign language program and the development of international education as its schoolwide theme, Snowden International High School has no bilingual program.

55. Citywide Education Coalition, "BPS Focus: Curriculum Reform," Boston, 1987.

56. Citywide Education Coalition, 1987.

57. Citywide Education Coalition, "Curriculum Reform: Summary Report," Boston, 1987, p. 2.

58. Mitchell, Haycock, and Navarro, p. 3.

59. Mitchell, Haycock, and Navarro, p. 7.

60. John Chubb, "Why the Current Wave of School Reform Will Fail," *The Public Interest* (90), Winter 1988, p. 37.

61. While some schools may place students at different levels for different courses, students placed in particular levels for math will often find themselves with the same group of students for other courses with similar ability labels such as Advanced Placement, Honors, College, Grade Level, General or Basic English. Thus, enrollment patterns in math courses are specific to the subject but also approximate patterns of access to knowledge generally. This use of mathematics course enrollment is not meant to imply that mathematics is the only or most valued area of knowledge. It is used as an example of the classification process generally.

62. Yohel Camayd-Freixas, *A Working Document on the Dropout Problem in Boston Public Schools*, Office of Research and Development, Boston Public Schools, May 1986.

63. Data released to the press in December 1989 indicated that 1,066 Boston seniors, 40% of all twelfth graders, were in danger of not graduating because they were not reading at eighth grade levels mandated under new graduation requirements. See Diego Ribadeneira, "Data: 40% of Hub seniors can't read at 8th grade level," *Boston Globe*, December 16, 1989, p. 1. Since then, the Boston School Committee has voted to delay the use of metropolitan Test Scores to determine high school graduation.

64. Mitchell, Haycock, and Navarro.
65. Donald Moore and Suzanne Davenport, *The New Improved Sorting Machine*, Chicago: Designs for Change, 1988. See especially Chapter 5.
66. *The High School Experience in Massachusetts*, Bureau of Research and Assessment, Massachusetts Department of Education, April 1986, p. 26.
67. *Ibid.*
68. Rafael Valdivieso, "Hispanics and Schools: A New Perspective," *Educational Horizons* 64 (4), Summer 1986.
69. Marvin Lazerson, Judith Block McLaughlin, Bruce McPherson, and Stephen K. Bailey, *An Education of Value*, New York: Cambridge University Press, 1985, pp. 55-57.
70. James Jennings, Kwami Sarpong, and Alice J. Burnette, "Blacks in Boston, Massachusetts: A Policy and Political Agenda," Black Agenda Steering Committee and the William Monroe Trotter Institute at the University of Massachusetts/Boston, Fall 1989, p. 27. The Committee defines "Black" as referring broadly to "various communities of color, including what some may call the 'Afro-American' or 'African-American' community as well as the various Latino communities, Haitians, Cape Verdeans, as well as others" (p. 15).
71. Gary G. Wehlage, Robert A. Rutter, Gregory A. Smith, Nancy Lesko, and Ricardo F. Fernandez, *Reducing the Risk: Schools As Communities of Support*, Philadelphia: Falmer Press, 1989.
72. Partnerships such as those between English High and Boston University, the West Zone schools and Boston College, the East Zone and the University of Massachusetts, and Charlestown High and Bunker Hill Community College are expanding opportunities for higher education for students in some district high schools. Moreover, scholarship aid available through the efforts of Boston businesses can help make college possible for many students who might otherwise find funding for further education impossible.
73. Peter Langer, "Patterns of Enrollment — Year Five: The Local College Enrollment and Retention of Boston Public School Graduates," Boston: Fenway Retention Consortium, June 1989.
74. Moore and Davenport, p. 97.
75. Mitchell, Haycock, and Navarro, p. 16.

Chapter 3: Is "More" Really Less?: The Mainstream and Special Education Students

1. Chapter 766 defines special education program prototypes according to the percentage of time a student receives special education services outside the regular classroom. Program prototypes are defined as follows: 502.1 — regular education program with modifications; 502.2 — regular education program with up to 25% time out for special services; 502.3 — regular education program with 25%-60% time out for special services; 502.4 — substantially separate program (over 60% of the time spent outside regular education programs). "Special schools" run by Boston Public Schools, such as the McKinley School for students with emotional/behavioral disabilities, enroll only students with specific disabilities and are defined as prototype 502.4(i), a substantially separate program.
2. *A Working Document on the Dropout Problem in Boston Public Schools*, Office of Research and Development, Boston Public Schools, May 1986, pp. 72-73. For detailed analyses of dropout data in Boston, see also *A Working Document on the Dropout Problem in Boston Public Schools 1986 Update*, Office of Research and Development, Boston Public Schools, October 1986; Dropouts in 1987, Office of Research and Development, Boston Public Schools, September 1987; and Leslie Horst and Maryellen Donahue, "Annual and Cohort Dropout Rates in Boston Public Schools: Focus on Programmatic and Demographic Characteristics," Boston Public Schools, February 1989. "Regular" students as defined by this last report include students who are not classified as special education or bilingual students and are not enrolled in examination high schools.

3. A cohort rate is used to monitor the incidence of dropping out over a period of several years, generally from ninth to twelfth grade, among a group of students expected to graduate together. The cohort rate thus suggests the chances of dropping out during secondary school. For further explanation of this and other related terms, see George Morrow, "Standardizing Practice in the Analysis of School Dropouts," *Teachers College Record* 87 (3), Spring 1986. In Boston, the cohort rate is calculated over five years to account for students who repeat one high school grade.

4. Boston Public Schools' Office of Research and Development has reported that students not promoted in high school are three times more likely than promoted students to drop out the following year and that dropouts are "much more likely to have been suspended at least once during the preceding year." See *A Working Document on the Dropout Problem in Boston Public Schools*, Boston Public Schools, May 1986, pp. 92-95. Non-promotion and suspension consistently have been cited as school practices which undermine school achievement and contribute to dropping out. See, for example, Lawrence G. Felice, "Black Student Dropout Behavior: Disengagement from School, Rejection, and Racial Discrimination," *Journal of Negro Education*, Fall 1981; C.T. Holmes and K.M. Matthews, "The Effects of Non-Promotion on Elementary and Junior High School Pupils: A Meta-Analysis," *Review of Educational Research* 54, 1984; Dale Mann, "Can We Help Dropouts: Thinking About the Undoable," *Teachers College Record*, Spring 1986; Massachusetts Advocacy Center, *The Way Out: Student Exclusion Practices in Boston Middle Schools*, Boston, 1986; and Gary Wehlage and Robert Rutter, "Dropping Out: How Do Schools Contribute to the Problem?" *Teachers College Record*, Spring 1986.

5. For example, between September 1987 and April 1988, 163 Boston students were denied occupational therapy, 99 students were denied physical therapy, and 25 students were denied both occupational and physical therapy, services required by their Individual Education Plans (IEPs). See Boston Public Schools, Memorandum from Dr. Nancy Mehlem, Monitor, to Michael A. Rebell, Esq., May 26, 1988. More recently, the Disengagement Master appointed by the Massachusetts Superior Court required Boston Public Schools to provide compensatory summer programs to 66 students who were denied occupational therapy for two months or more during the 1988-89 school year. See *Disengagement Master Report No. 3*, Superior Court, C.A. No. 14948.

Moreover, a Department of Education monitor has issued a report citing "significant violations" in the compliance of Boston Public Schools with the state special education law, particularly in the areas of transportation, speech therapy, and the translation of IEPs into other languages. The report indicates that some of the compliance figures supplied by the school department itself were inaccurate and that the extent of non-compliance might be even greater. The Monitor has recommended that the state withhold at least \$1 million in federal funds from the school department. See *Allen Monitor's Report on Defendants' Boston Public Schools Progress in Achieving Compliance in Allen v. McDonough*, July 1989.

6. This consequence has also been noted in other districts. For example, one third grade teacher in Chelsea, Massachusetts reports that so many of her students are pulled out of class that she has only about an hour and a half a day when all the children are in class at the same time. See Muriel Cohen, "Teaching 3rd Grade," *Boston Globe*, October 19, 1989.

7. George J. Hagerty and Marty Abramson, "Impediments to Implementing National Policy Change for Mildly Handicapped Students," *Exceptional Children* 53, 1987, p. 316.

8. "The Mainstreaming Debate," *The Harvard Education Letter* 5 (2), March/April 1989, p. 2.

9. Nancy A. Madden and Robert E. Slavin, "Mainstreaming Students with Mild Handicaps: Academic and Social Outcomes," *Review of Educational Research* 50 (5), Winter 1983; Madden and Slavin, "Effective Pull-Out Programs for Students At Risk," Center for Research on Elementary and Middle Schools, Report No. 20, November 1987.

10. While this discussion focuses on special education, Boston schools also rely heavily on a pull-out approach to the delivery of Chapter 1 services. See Chapters 7 and 9 for further discussion of Chapter 1 nationally and in Boston.

11. deLone, p. 106.

12. Yohel Camayd-Freixas, Noe Medina, and Leslie Horst, "The Special Education Program: An R & D Accountability Study," Boston Public Schools, Office of Research and Development, August 1987. See also: Massachusetts Advocacy Center, *Out of the Mainstream: The Education of Disabled Students in Massachusetts*, Boston, May 1987.
13. 603 C.M.R. sec. 28.00, par. 508.0.
14. Alan Gartner and Dorothy Kerzner Lipsky, "Beyond Special Education: Toward a Quality System for All Students," *Harvard Educational Review* 57 (4), November 1987, p. 375.
15. Lou Brown, A. Ford, J. Nesbit, M. Sweet, A. Donnellan, and L. Gruenewald, "Opportunities Available When Severely Handicapped Students Attend Chronological Age Appropriate Regular Schools," *The Journal of the Association of Persons with Severe Handicaps* 8 (3), 1983, pp. 17-19.
16. Massachusetts Advocacy Center, *Out of the Mainstream*, p. 5.
17. Camayd-Freixas, Medina, and Horst, *op. cit.* The problem of racial segregation of minority students in special education in Boston and other urban districts in Massachusetts was first documented in 1978. See Massachusetts Advocacy Center, *Double Jeopardy: The Plight of Minority Students in Special Education*, Boston, 1978.
18. In 1989-90, Boston designated the O'Hearn Elementary School as its first "integrated" school. Students with disabilities will be mainstreamed in kindergarten and then in additional grades in subsequent years. While it is too soon to assess the impact of this effort, research suggests this is a positive model for other Boston schools.
19. Margaret C. Wang and Jack W. Birch, "Comparison of a Full-Time Mainstreaming Program and a Resource Room Approach," *Exceptional Children*, September 1984. See also Margaret C. Wang, Stephen Peverly, and Robert Randolph, "An Investigation of the Implementation and Effects of a Full-Time Mainstreaming Program," *Remedial and Special Education*, November/December 1984, and Debra Viadero, "Amazing What You Can Teach in 5 Minutes Alone with a Child," *Education Week*, February 24, 1988.
20. James Q. Affleck, Sally Madge, Abby Adams, and Sheila Lowenbraun, "Integrated Classroom Versus Resource Model: Academic Viability and Effectiveness," *Exceptional Children* 54 (4), January 1988, p. 347.
21. Gaea Leinhardt and Allan Pallas, "Restrictive Educational Settings: Exile or Haven?" *Review of Educational Research* 52 (4), 1982.
22. For a more detailed discussion of cooperative learning, see Chapter 6 of this report.
23. Frank M. Gresham, "Strategies for Enhancing the Social Outcomes of Mainstreaming: A Necessary Ingredient for Success," in *Mainstreaming Handicapped Children: Outcomes, Controversies, and New Directions*, C. Julius Meisels, ed., Hillsdale, NJ: Lawrence Erlbaum, 1986, pp. 201, 213.
24. David W. Johnson and Roger T. Johnson, "Integrating Handicapped Students Into the Mainstream," *Exceptional Children* 47 (2), October 1980, pp. 90-98; Johnson and Johnson, "Building Friendships Between Handicapped and Nonhandicapped Students: Effects of Cooperative and Individualistic Instruction," *American Educational Research Journal* 18 (4), Winter 1981, pp. 415-423; Johnson and Johnson, "The Impact of Classroom Organization and Instructional Methods on the Effectiveness of Mainstreaming," in Meisels, *op. cit.* pp. 219-250.
25. Johnson and Johnson, 1980, p. 97.
26. William E. Bickel and Donna Diprima Bickel, "Effective Schools, Classrooms, and Instruction: Implications for Special Education," *Exceptional Children* 52 (6), 1986. See also a parallel suggestion to use Chapter 1 specialists as consultants to regular classroom teachers to avoid pullout in Eyler, Cook, Ward, 1983.
27. Frank Laski, Thomas Gilhool, and Stephen F. Gold, "A Legal Duty to Provide Effective Schooling," June 1983, cited in Gartner and Lipsky, p. 389.
28. Maynard Reynolds, Margaret C. Wang, and Herbert Walberg, "The Necessary Restructuring of Special and Regular Education," *Exceptional Children* 53 (5), February 1987.

29. See, for example, Paul Bates, *et al.*, "The Effect of Functional vs. Non-functional Activities on Attitudes/Expectations of Non-Handicapped College Students: What They See is What We Get," *Journal of the Association for Severe Handicaps* 9 (2), 1984; Samuel L. Odom, Michelle Deklyen, and Joseph R. Jenkins, "Integrating Handicapped and Nonhandicapped Preschoolers: Developmental Impact on Nonhandicapped Children," *Exceptional Children* 51 (1), September 1984; Jeff Strully and Cindy Strully, "Friendship and Our Children," *Journal of the Association of Severe Handicaps* 10 (4), 1985; William Stainback and Susan Stainback, "A Review of Research on Interactions Between Severely Handicapped and Nonhandicapped Students," *TASH Journal* 6, Fall 1981; Luanna M. Voeltz, "Effects of Structured Interactions with Severely Handicapped Peers on Children's Attitudes," *American Journal of Mental Deficiency* 86 (4), 1982.
30. Douglas Biklen, *et al.*, *Achieving the Complete School: Strategies for Effective Mainstreaming*, New York: Teachers College Press, 1985, p. 9.
31. See Massachusetts Advocacy Center, *Out of the Mainstream: The Education of Disabled Children in Massachusetts* for a more complete discussion of these issues.
32. One recent report has speculated, "Since Boston introduced its new promotion gates policy within the past three years, the increase in special placement students might well be a school response to the new policy. Special students are not required to take the tests and their scores are not included in computations of school averages or used for promotions." The relationship between a more rigid mainstream and increased numbers of students in special education is a focus of an as yet unpublished study by the National Center for Policy Research in Education, which has found that in six states which have introduced high-stakes testing programs and tougher standards, special education placement has increased substantially. See Eleanor Farrar and Colleen Connolly, "Improving Middle Schools in Boston: A Report on Boston Compact and School District Initiatives," Paper prepared for the Edna McConnell Clark Foundation of New York, September 1989.
33. Paul R. Swank, Ronald D. Taylor, *et al.*, "Outcomes of Grouping Students in Mainstreamed Middle School Classrooms," *NASSP Bulletin* 73 (516), April 1989.
34. Edgar S. Cahn, "Remedy-Based Litigation: A Strategy for the Creation of New Rights and the Replication of Successful Demonstrations," Working Paper, Unpublished, 1988.
35. Education of the Handicapped Act and Regulations, Subchapter V — Research in Education of Handicapped, Sec. 1441 (a), Supplement 187, Alexandria, VA: CRR Publishing, 1987.
36. Timothy W. Etc., *v. Rochester, New Hampshire School District*, No. 88-1847, slip op. at p. 33, May 24, 1989.

Chapter 4: Caught in the Middle: The Mainstream and Bilingual Education Students

1. *School Profiles 1987-88*, Boston Public Schools.
2. In 1971, for example, the Task Force on Children Out of School in Boston reported that the district was providing bilingual classes for only 120 Boston students while "thousands of children [were] out of school because there [were] no educational programs for them." While this estimate included 5,000 to 7,000 Spanish-speaking children, it also included an undocumented number of children from Italian, Portuguese, and Chinese families who did not speak English. The Task Force described this as an "emergency situation" and called for immediate action by the Boston School Department and the State Department of Education. See Task Force on Children Out of School, *The Way We Go To School: The Exclusion of Children in Boston*, Boston: Beacon Press, 1971.

3. See, for example, Virginia P. Collier, "How Long? A Synthesis of Research on Academic Achievement in Second Language," *TESOL Quarterly* 23 (3), September 1989, pp. 509-531; Jim Cummins, "Empirical and Theoretical Underpinnings of Bilingual Education," *Boston University Journal of Education*, Winter 1981; Jim Cummins, "Linguistic Interdependence and the Educational Development of Bilingual Children," *Review of Educational Research* 49, 1979; *Bilingual Education: A New Look At the Research Evidence*, Washington, DC: United States General Accounting Office, March 1978; Ann Willig, "Meta-Analysis of Studies on Bilingual Education," *Review of Educational Research* 55 (3), 1985; "When Children Speak Little English: How Effective is Bilingual Education?" *Harvard Education Letter* 2 (6), November 1986.
4. *A Working Document on the Dropout Problem in Boston Public Schools*, Office of Research and Development, Boston Public Schools, May 1986, pp. 80-81. Also see Leslie Horst and Maryellen Donahue, "Annual and Cohort Dropout Rates in Boston Public Schools: Focus on Programmatic and Demographic Characteristics," Boston Public Schools, February 1989.
5. Collier, p. 23.
6. Student comments were gathered through individual interviews with students and from a taped discussion with a panel of students from Puerto Rico, Guatemala, El Salvador, Dominican Republic, Colombia, Bolivia, Vietnam, and Cambodia.
7. deLone, p. 107.
8. Martha Montero-Sieburth, "Conceptualizing Multicultural Education: From Theoretical Approaches to Classroom Practice," *Equity and Choice*, Spring 1988. For a perspective on how this conceptualization applies to the bilingual teacher as well, see Martha Montero-Sieburth and Marla Perez, "Echar Pa'lante, Moving Onward: The Dilemmas and Strategies of a Bilingual Teacher," *Anthropology and Education Quarterly* 18, 1987.
9. A recent case study of the bilingual education program in an urban high school in the Northeast describes dramatic status differences between bilingual and general education teachers. See Martha Montero-Sieburth, "The Role of Bilingual Education in Curriculum Differentiation: Vignettes from Secondary Schooling," in *Teachers' Knowledge and Educational Processes In an Urban School Community: Towards Self-Determination or Assimilation?*, Martha Montero-Sieburth, ed., forthcoming.
10. Data compiled by Boston Public Schools, Office of Equal Opportunity, May 1989.
11. See Chapter 8 of this report for a discussion of such efforts in Boston.
12. Deborah L. Gold, "Two Languages, One Aim: 'Two-Way' Learning," *Education Week*, January 20, 1988, p. 7.
13. See, for example, Jose A. Vasquez, "Bilingual Education's Greatest Potential: Enrichment for All," *National Association of Bilingual Education Journal*, May 1976, pp. 23-26.
14. Gold, p. 7.
15. A recent study of the long term influence of participation in two-way bilingual programs located and questioned twenty Anglo and Hispanic graduates of two-way bilingual classes in Washington, DC elementary schools. The study concluded that these graduates had been very successful in both their academic and professional lives, had maintained proficiency in both languages a decade after participation in the program, and continued to have extensive interaction with speakers of both languages. All of the graduates spoke enthusiastically of their participation in two-way programs and many described it as a major turning point in their lives. "Most important were the values the experience gave us — the exposure to another culture shapes my outlook and continual interest in furthering international understanding," said one student; while another explained, "Aside from the obvious advantage of learning a second language, I learned respect and patience for non-English speakers. Because we struggled alongside one another in a way that, otherwise, we might not have." See Virginia P. Collier, "Academic Achievement, Attitudes, and Occupations Among Graduates of Two-Way Bilingual Classes," Paper presented at the annual meeting of the American Education Research Association, San Francisco, CA, March 1989.

16. Virginia Vogel Zanger, "Classroom Activities Most Appropriate for Limited-English Speakers," 1989.
17. Christine E. Sleeter, "An Analysis of Multicultural Education in the United States," *Harvard Educational Review* 57 (4), November 1987; Virginia Vogel Zanger, "Chats in the Teachers Lounge Are Not Enough: Preparing Monolingual Teachers for Bilingual Students," *Equity and Choice* 5 (2), March 1989.
18. Anne Hafrey, Gregory Perkins, Alexander Ganz, and Margaret C. O'Brien, "Population Projections for Boston and for Boston City Hospital Neighborhoods — By Race, Ethnicity, Age, Income and Poverty Status — To the Year 2000," Boston Redevelopment Authority, August 1985.

Chapter 5: Sorting, Ability Grouping, and Tracking: Research Evidence for School Restructuring

1. It is estimated that 77% of all schools nationally use ability grouping practices, with an even greater percentage in secondary schools alone. See Warren Findley and Miriam Bryan, *The Pros and Cons of Ability Grouping*, Bloomington, IN: Phi Delta Kappa Educational Foundation, 1975.
2. This summary of the research relies primarily on the work of John Goodlad and Jeannie Oakes. See John I. Goodlad, *A Place Called School: Prospects for the Future*, New York: McGraw-Hill, 1984; Jeannie Oakes, *Keeping Track*, New Haven, CT: Yale University Press, 1985; Jeannie Oakes, "Keeping Track, Part 1: The Policy and Practice of Curriculum Inequality," *Phi Delta Kappan*, September 1986(a). Also see Caroline J. Persell, *Education and Inequality: The Roots and Results of Stratification in America's Schools*, New York: Free Press, 1977; and James E. Rosenbaum, *Making Inequality: The Hidden Curriculum of High School Tracking*, New York: Wiley 1976.
3. Oakes, 1985, p. 7.
4. See Ernest Boyer, *High School: A Report on Secondary Education in America*, New York: Harper & Row, 1983; Goodlad, 1984; Robert E. Slavin, *Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis*, Baltimore: Center for Research on Elementary and Middle Schools, Johns Hopkins University, 1986.
5. Oakes, 1986(a).
6. Oakes, "Tracking: Can Schools Take a Different Route?" *National Education Association*, January 1988, p. 43.
7. Oakes, 1986(a), p. 18.
8. Goodlad, 1984, p. 297.
9. Goodlad, 1984; Good and Brophy, 1987; Oakes, 1985.
10. Good and Brophy, p. 408.
11. Oakes, 1985; Oakes, 1986(a); Goodlad, 1984.
12. Oakes, 1988, p. 44.
13. See deLone, pp. 97-112.
14. Oakes, 1985; Oakes, 1986(a); Oakes, 1988.
15. D. Monty Neill and Noe J. Medina, "Standardized Testing: Harmful to Educational Health," *Phi Delta Kappan* 70 (9), May 1989, p. 689.
16. Neill and Medina, p. 689.
17. Oakes, 1988, p. 44.
18. One study cited by Oakes (1986a), notes a drop in the I.Q. scores of senior high school students following their placement in low-track classes. See William B. Pillsbury, "Selection: An Unnoticed Function of Education," *Scientific Monthly*, 12, 1921, p. 71.
19. Claude N. Goldenberg, "Ability Grouping in Elementary School: Are We Creating Learning Opportunities or Illusions?," unpublished paper presented at hearings of the Achievement Council, California, June 1987.
20. Oakes, 1985, p. 14.

21. Oakes, 1986(a), p. 15.
22. Goodlad, 1984; Oakes, 1985; Oakes, 1986(a); Oakes, 1988.
23. Goodlad, 1984, p. 155. Goodlad notes that the average classes in the study were perceived as in-between the high- and low-tracks but more like the high than the low in all categories except in terms of student competitiveness and apathy in which they more closely resembled the low-tracks. In general they may be considered "watered-down versions of high-track classes." This similarity of high- and middle-tracks further emphasizes the relative isolation of the low-track classes.
24. Mitchell, Haycock, and Navarro, p. i.
25. Carnegie Council on Adolescent Development, *Turning Points: Preparing American Youth for the 21st Century*, Washington, DC: Carnegie Corporation, June 1989, pp. 49-50.
26. *Making the Middle Grades Work*, Washington, DC: Children's Defense Fund, 1988, pp. 6-7.
27. Ann Bastian, Norm Fruchter, Marilyn Gittell, Colin Greer, Kenneth Haskins, *Choosing Equality: The Case for Democratic Schooling*, New York: The New World Foundation, 1986, pp. 162-163.
28. *Barriers to Excellence: Our Children At Risk*, Boston, MA: National Coalition of Advocates for Students, 1986, p. 37.
29. Committee on Policy for Racial Justice, *Visions of a Better Way: A Black Appraisal of Public Schooling*, Washington, DC: Joint Center for Political Studies Press, 1989, p. 36.
30. National Commission on Secondary Schooling for Hispanics, "Make Something Happen: Hispanics and Urban High School Reform," Washington, DC: Hispanic Policy Development Project, 1984, pp. 34-35.
31. *Current Practice: Is It Enough?*, Denver, CO: Education Commission of the States, June 1989, pp. 22-25.
32. Massachusetts Department of Education, "Structuring Schools for Student Success: A Focus on Ability Grouping," Draft Policy Advisory, 1989, p. 10-11.
33. Janice Earle, *The Steps to Restructuring: Changing Seattle's Middle Schools*, Arlington, VA, National Association of State School Boards, 1989.
34. National Education Association, Resolution C-28: Discriminatory Academic Tracking, 1988.
35. Quality Education for Minorities Project, *Education That Works: An Action Plan for the Education of Minorities*, Cambridge, MA, Massachusetts Institute of Technology, January, 1990.
36. "NMSA Resolutions 1988-1989," *Target*, Newsletter of the National Middle School Association, Winter 1989, p. 4.

Chapter 6: Making Diversity Work: Alternatives and Challenges to Tracking

1. *Constitution of the Commonwealth of Massachusetts*, Chapter V, Section II.
2. David L. Kirp, "The Poor, the Schools, and Equal Protection," *Harvard Educational Review* 38 (4), Fall 1968, pp. 636-642.
3. Kirp, p. 652.
4. "Teaching Inequality: The Problem of Public School Tracking," *Harvard Law Review* 102 (6), April 1989, p. 1334.
5. Goodlad, p. 297.
6. Edgar S. Cahn, "Remedy-Based Litigation: A Strategy for the Creation of New Rights and the Replication of Successful Demonstrations," *Working Papers*, 1988, p. 1.
7. Cahn, 1988, p. 1.
8. *Hobson v. Hansen* 517, F. Supp. 401 (D.C.D.C. 1967); cited in Kirp, p. 668.

9. Mitchell, Haycock, and Navarro, p. 5.
10. Randi Londer Gould, "Teaming Up in the Classroom," *Family Circle*, September 5, 1989, p. 100.
11. Barbara Z. Presseisen, "Thinking Success for All Students: Understanding the Issues," in Barbara Z. Presseisen, ed., *At-Risk Students and Thinking: Perspectives from Research*, National Education Association and Research for Better Schools, 1988, p. 39.
12. The Introduction to the Boston Education Plan, touted by Boston's superintendent as his most important accomplishment, identifies among the Plan's "initiatives," the improvement of students' math and reading achievement "through improved teaching techniques and instructional materials, with special emphasis on creative problem solving strategies...[and] higher-order/critical thinking, listening, speaking, and viewing skills." See the Boston Education Plan, Boston Public Schools, May 1987.
- Yet despite this rhetoric, the overwhelming thrust of Boston's Plan thus far has been to increase the emphasis placed on basic skills. Indeed, a substantial amount of funding has been targeted to programs such as Project Promise, designed to provide students with "intensive basic skills development," according to Boston Public Schools' FY87 application for Chapter 188 funding, while one of the superintendent's major initiatives over the past several years was the push for adoption of a single basal textbook series in reading and mathematics.
13. Susan J. Rosenholtz and Elizabeth G. Cohen, "Back to Basics and the Desegregated School," *The Elementary School Journal* 83 (5), May 1983, p. 523.
14. Gerald Bracey, "Advocates of Basic Skills 'Know What Ain't So,'" *Education Week*, April 5, 1989, p. 32.
15. Bracey, p. 32.
16. Beau Fly Jones, "Toward Redefining Models of Curriculum and Instruction for Students At-Risk," in Barbara Z. Presseisen, ed., 1988, pp. 80, 97.
17. Pamela Keating and Jeannie Oakes, "Access to Knowledge: Breaking Down School Barriers to Learning," Denver, CO: Education Commission of the States, August 1988, p. 9.
- See also Larry Cuban, "Schooling the At-Risk Child: Lessons for Policymakers and Practitioners," Paper presented at the North Central Regional Educational Laboratory Conference, Chicago, 1987; Jim Cummins, "Empowering Minority Students: A Framework for Intervention, 1986; U. Neisser, ed., *The School Achievement of Minority Children: New Perspectives*, Hillsdale, NJ: Lawrence Erlbaum, 1986.
18. Stanley Pogrow, "The Effects of Intellectually Challenging At-Risk Elementary Students: *The 35 Minute Principle* and Other Results from the HOTS Program," to be published in *Phi Delta Kappan*, Spring 1989, p. 5.
19. Pogrow, 1989, p. 7.
20. Pogrow, 1989, p. 2.
21. Pogrow, 1989, p. 4.
22. The HOTS program thus meets the mandate of the new Chapter 1 Act to provide Chapter 1 students with both the basic and more advanced skills that all children are expected to master. See Chapter 7 for a discussion of the potential of Chapter 1 to facilitate school de-tracking.
23. See also Stanley Pogrow, "Teaching Thinking to At-Risk Elementary Students," *Educational Leadership*, April 1988, pp. 79-85; and Stanley Pogrow, "HOTS: A Thinking Skills Program For At-Risk Students," *Young Children* 43 (4), March 1988, pp. 19-23.
24. Henry Levin, "Accelerated Schools for At-Risk Students," Center for Policy Research in Education, Rutgers University, September 1988, p. 20.
25. Levin, 1988, p. 22.
26. See also Henry M. Levin, "Educational Reform for Disadvantaged Students: An Emerging Crisis," National Education Association, 1986; Henry M. Levin, "Don't Remediate: Accelerate," Summary of keynote address at the Conference on Accelerating the Education of At-Risk Students, Stanford University, November 1988.

27. Helen Featherstone, "Cooperative Learning," *Harvard Education Letter*, September 1986, p. 5.
28. See, for example, Johnson and Johnson, 1975; D.W. Johnson, R.T. Johnson, and L. Scott, "The Effects of Cooperative and Individualized Instruction on Student Attitudes and Achievement," *Journal of Social Psychology* 104, 1978; Johnson and Johnson, "The Effects of Cooperative and Individualistic Instruction on Handicapped and Nonhandicapped Students," *Journal of Social Psychology* 118, 1982; Johnson, Johnson, Holubec, and Roy, 1984; Sharan, Kussel, Hertz-Lazarowitz, Bejarano, Raviv, and Sharan, 1984; Robert E. Slavin, "Cooperative Learning: Where Behavioral and Humanistic Approaches to Classroom Motivation Meet," *The Elementary School Journal* 88 (1), 1987; Robert E. Slavin, "Cooperative Learning and Student Achievement," *Educational Leadership*, October 1988.
29. Good and Brophy, p. 440.
30. Fred M. Newmann and Judith A. Thompson, "Effects of Cooperative Learning on Achievement in Secondary Schools: A Summary of Research," National Center on Effective Secondary Schools, University of Wisconsin-Madison, September 1987.
31. David W. Johnson and Roger T. Johnson, *Learning Together and Alone*, Englewood Cliffs, NJ: Prentice-Hall, 1975; D.W. Johnson, R.T. Johnson, E.J. Holubec, P. Roy, *Circles of Learning: Cooperation in the Classroom*, Alexandria, VA: Association for Supervision and Curriculum Development, 1984.
32. S. Sharan and Y. Sharan, *Small-group Teaching*, Englewood Cliffs, NJ: Educational Technology Publications, 1976; S. Sharan, P. Kussel, R. Hertz-Lazarowitz, Y. Bejarano, S. Raviv, Y. Sharan, *Cooperative Learning in the Classroom: Research in Desegregated Schools*, Hillsdale, NJ: Lawrence Erlbaum, 1984.
33. E. Aronson, N. Blaney, C. Stephan, J. Sikes, and M. Snapp, *The Jigsaw Classroom*, Beverly Hills, CA: Sage, 1978.
34. Robert E. Slavin, *Using Student Team Learning*, Baltimore, MD: Center for the Social Organization of Schools, Johns Hopkins University, 1980.
35. D.L. DeVries, R.E. Slavin, K.J. Edwards, and M.M. Lambardo, "Team-Games-Tournament (TGT): Review of Ten Classroom Experiments," *Journal of Research and Development in Education* 12, 1978; D.L. DeVries, R.E. Slavin, and G.M. Fennessey, *Team-Games-Tournament: The Team Learning Approach*, Englewood Cliffs, NJ: Educational Technology Publications, 1980.
36. Robert E. Slavin, "Student Teams and Achievement Divisions," *Journal of Research and Development in Education* 22, 1978.
37. Robert E. Slavin, "Team-Assisted Individualization: A Cooperative Learning Solution for Adaptive Instruction in Mathematics," in M.C. Wang and H.J. Walberg, eds., *Adapting Instruction to Individual Differences*, Berkeley, CA: McCutchan, 1985.
38. R.J. Stevens, N.A. Madden, R.E. Slavin, and A.M. Farnish, "Cooperative Integrated Reading and Composition: Two Field Experiments," *Reading Research Quarterly* 22, 1987.
39. Good and Brophy, p. 437.
40. Slavin, 1988, pp. 31-33.
41. Robert E. Slavin *Cooperative Learning*, NY: Longman, 1983, p. 128.
42. Levin, 1988, p. 29.
43. Good and Brophy, p. 445.
44. Elizabeth G. Cohen and M. Beatriz Arias, "Limited English Students Can Benefit From Accelerated Classes," Summary of paper presented at the Conference on Accelerating the Education of At-Risk Students, Stanford University, November 1988.
45. Cohen and Arias, 1988.
46. Helen Featherstone, "Big Kids Teach Little Kids: What We Know About Cross-Age Tutoring," *Harvard Education Letter*, March 1987; Marsha Levine, "Documur Docendo (He Who Teaches Learns)," *American Educator* 10 (3), Fall 1986.
47. Jose A. Cárdenas and Mercé G. Ramos, "VFP Celebrates Fifth Successful Year," Intercultural Development and Research Association, Newsletter 16 (6), June 1989.

48. Larry Cuban, "The 'At-Risk' Label and the Problem of Urban School Reform," *Phi Delta Kappan*, June 1989, p. 782.
49. David Pratt, "On the Merits of Multiage Classrooms," *Research in Rural Education* 3 (3), 1986, p. 114.
50. Deborah L. Cohen, "First Stirrings of a New Trend: Multi-Age Classrooms Gain Favor," *Education Week*, December 6, 1989, p. 13.
51. See Chapter 9 for further discussion of the recommendations of these groups regarding developmentally appropriate practice in the early childhood years.
52. D. Cohen, 1989, p. 15.
53. D. Cohen, 1989, p. 13.
54. Cuban, 1989, p. 799.
55. D. Cohen, 1989, pp. 14-15.
56. Pratt, p. 114.

Chapter 7: Pioneers of School Restructuring: New Directions from Across the Country

1. *Current Practice: Is It Enough?*, Denver: Education Commission of the States, June 1989, p. 25.
2. Louis Freedberg, "Don't Remediate, Accelerate," *California Tomorrow*, Winter 1989, pp. 30-31.
3. Henry M. Levin, "Teacher/Student/Parent Empowerment and the Accelerated School," Paper presented at the Conference on Accelerating the Education of At-Risk Students, San Francisco, November 1988.
4. Freedberg, p. 31.
5. Lynn Olson, "A Seattle Principal Defies the Conventional Wisdom," *Education Week*, April 13, 1988, p. 1.
6. Olson, p. 22.
7. See James H. Lytle, "Revised Chapter 1 Opens Options for Schoolwide Plan," *Education Week*, December 14, 1988.
8. Phil Swartzbaugh, "Eliminating Tracking Successfully," in Goodlad and Oakes, 1988, p. 20.
9. Anne Lewis, "On a Roll with High Expectations," *High Strides*, March 1989; see also Mitchell, Haycock, and Navarro, p. 13.
10. Information regarding the Middle School of the Kennebunks was provided by Sandra Caldwell at a conference on "Changing Schools and Communities to Ensure Student Success," sponsored by the Massachusetts Department of Education, Marlboro, MA, April 4, 1989.
11. Deborah Meier, "Success in East Harlem," *American Educator*, Fall 1987, p. 34.
12. For a detailed history of CPE, see David Bensman, *Quality Education in the Inner City: The Story of the Central Park East Schools*, New York: Central Park East School, 1987.
13. Deborah Meier, "Success in East Harlem: Question the Content," *High Strides* 1 (2), May 1989.
14. In September 1989, the Denver Board of Education approved a plan that would entail similar reforms. This plan, designed to ensure that all students graduate from high school with the skills and knowledge needed for college and the job market, calls for: the elimination of remedial classes and placement of low-achieving students in regular classes; the revision of school curricula to include an emphasis on critical thinking and problem-solving skills and to reflect the varied cultures represented in the school community; and the introduction of new assessments to match the revised curricula. See Robert Rothman, "In An Effort to Boost Achievement, Denver Abolishes Remedial Classes," *Education Week*, October 11, 1989.

15. Richard Benjamin, Report of the Task Force on Instructional Grouping, Ann Arbor Public Schools, June 1987.
16. Doreen Poupard-Tice, "Developing an Instructional Grouping Policy: A Participatory Model," Ann Arbor, MI: Ann Arbor Public Schools, March 1988.
17. "The Current Operation of the Chapter 1 Program," Office of Educational Research and Improvement, U.S. Department of Education, 1987, p. 86.
18. Summary of Major Concerns About Chapter 1 Final Regulations, Washington, DC: National Coalition of Title I/Chapter 1 Parents, June 12, 1989, p. 2.
19. The Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary Improvement Amendments of 1988, P.L. 100-297, April 28, 1988.
20. Many Chapter 1 parents and educators express concern that the so-called "objective" state and national standards upon which LEAs and SEAs must base their assessments rely too much on standardized testing, and suggest that other measures such as assessments by teachers would provide a more accurate representation of student success. For example, the National Coalition of Title I/Chapter 1 Parents asserts that "a national, standardized, norm-referenced test will not tell a district whether the locally selected skills have been mastered....The regulations' one-sided focus on standardized, norm-referenced tests is likely to perpetuate teaching to the tests, rote memory exercises, repetitive number drills, and numerous other barriers to learning 'more advanced skills.'" See Summary of Major Concerns About Chapter 1 Final Regulations, p. 5.
21. *Congressional Record*, April 19, 1988, H. 1821. See also House Committee Report, H.R. 100-95, School Improvement Act of 1987, To Accompany H.R. 5, May 15, 1987.
22. The Current Operation of the Chapter 1 Program, p. 101.
23. See Paul Weckstein, Kathleen B. Boundy, and Shelley Jackson, "Developments in Education Law in 1988," *Clearinghouse Review*, January 1989, pp. 1018-1020; and "Congress Institutes Major Changes in Chapter 1 and Other Elementary and Secondary Programs," Center for Law and Education, September 1988.

Chapter 8: Restructuring in Boston: Promising Beginnings in the Schools

1. In August 1989 the Mackey Middle School was closed as part of a systemwide school closings and merger plan.
2. Oakes, 1988, p. 45.
3. Berta Berriz and Beth Handman, "Cooperative Learning in the Bilingual Classroom," *MABE Newsletter* 7, Massachusetts Association for Bilingual Education, Winter 1989, p. 3.
4. Isabel Mendez, "The Effect of the Reform Movement and Restructuring of School on Bilingual Education Programs," *Teachers as Activators*, Newsletter from District A of the Boston Public Schools, February 1989.
5. "Discovery Academy: 1987-88," Scrapbook, Comments by Discovery Academy Students, June 1988. Discovery Academy existed through June 1989. In August 1989, the Boston School Committee voted to close two middle schools, including the Mackey. Teachers' efforts to find appropriate space for the program in another middle school were unsuccessful.
6. Good and Brophy, p. 407.
7. Conversation with Barbara Ernst-DiGennaro, June 1989.
8. Pratt asserts "Even the least radical multi-age structure, the split-grade classroom, can deal much more flexibly with both faster and slower learners [than age-segregated placements]," and concludes that multi-age and multi-grade groupings are more socially and psychologically healthful environments. See Pratt, 1986, p. 114.

Chapter 9: Barriers to De-Tracking in Boston

1. Thomas B. Timar and David L. Kirp, "Education Reform in the 1980s: Lessons from the States," *Phi Delta Kappan*, March 1989, p. 510-511.

2. Timar and Kirp, 1989, p. 506. See also Donald C. Orlich, "Education Reforms: Mistakes, Misconceptions, Miscues," *Phi Delta Kappan*, March 1989; and William Chance, "...the Best of Educations," Denver: Education Commission of the States, 1988.

Chance reports that in response to the calls for educational reform in the early and mid-1980s: 43 states set higher standards for high school graduation; 17 states raised college admissions standards; 37 states introduced statewide student assessment programs; 29 states established teacher competency testing; and 28 states instituted changes in teacher certifications.

3. Positive aspects proposed by the Boston Education Plan include, but are not limited to: the introduction of curriculum specialists to coach and support teachers; identification and sharing of successful programs and instructional practices; improved teacher training; smaller class sizes; more school-site planning and assessment; flexible scheduling and teacher planning time; increased use of mediation and conflict resolution approaches to discipline; attendance incentives for vulnerable students; and school incentive programs to recognize and reward schools with strong "holding power." Few of these proposals have been systematically implemented.

4. See D. Monty Neill and Noe J. Medina, May 1989. The authors explain, "*Objective* merely means that the tests can be scored by machines, not by subjective human scorers. Bias can still creep into the questions themselves. In fact, the purported objectivity of tests is often no more than the standardization of bias" (p. 692).

5. Neill and Medina, 1989, p. 689.

6. *Right From the Start*, National Association of State Boards of Education, Report of the NASBE Task Force on Early Childhood Education, 1988, p. 3.

7. See, for example, NASBE, *Right From the Start*; "NAEYC Position Statement," 1988; Tom Schultz, "Testing and Retention of Young Children," *Phi Delta Kappan*, October 1989; Edward L. McDill, Nancy Karweit, Gary Natriello, Aaron Pallas, "The Growth of Kindergarten and Its Impact on Disadvantaged Students," Paper prepared for the annual meeting of the American Educational Research Association, March 1989; and Nancy Karweit, "Effective Elementary Programs and Practices for At-Risk Students," Paper prepared for the annual meeting of the American Educational Research Association, April 1988.

8. Nancy Karweit, 1988, p. 8.

9. James Wolf and Anna Kessler, *Entrance to Kindergarten: What is the Best Age?* Arlington, VA: Educational Research Service, 1987, pp. 34-35.

10. See Samuel Meisels "High Stakes Testing in Kindergarten," *Educational Leadership*, April 1989.

11. For example, the Intercultural Development Research Association "condemns the use of all standardized achievement tests before the third grade and calls for discontinuing their use in kindergarten through the second grade. See "IDRA calls for Elimination of K-2 Testing," Intercultural Development Research Association newsletter, September 1988, p. 4. Moreover, effective with the 1989-90 academic year, Mississippi will discontinue statewide testing of kindergarteners; North Carolina has eliminated state-mandated tests for first and second graders, barred local districts from using any standardized tests in these grades, and approved alternative methods of assessment for young children; Texas has abolished basic skills testing in first grade; Georgia has approved a proposal to drop pencil-and-paper tests to assess the "readiness" of kindergarteners for first grade; and Arizona no longer requires local districts to administer standardized tests to first graders, although the state will continue the sample-testing of these students.

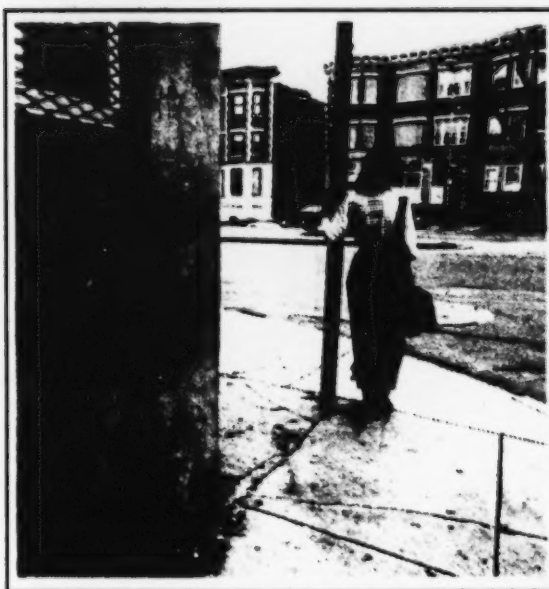
12. *Right from the Start*, NASBE, p. 15.
13. *Right from the Start*, NASBE, p. 1.
14. See Linda McNeil, *Contradictions of Control: School Structure and School Knowledge*, New York: Routledge and Kegan Paul, 1986; George F. Madaus, "Testing and the Curriculum: From Compliant Servant to Dictatorial Master," *National Society for the Study of Education*, 1987; and Neill and Medina, 1989.
15. National Association for the Education of Young Children, "Testing of Young Children: Concerns and Cautions," NAEYC pamphlet, 1988.
16. National Association for the Education of Young Children, "NAEYC Position Statement on Standardized Testing of Young Children 3 Through 8 Years of Age," *Young Children*, March 1988, pp. 42-43.
17. Chapter 1 Project Application: 1989-1992, Department of Chapter 1 Programs, Boston Public Schools, p. 22.
18. Robert Slavin and Nancy Madden describe a "comprehensive approach" to the education of "at-risk" students as one that includes a schoolwide plan for success that states that it is the school's responsibility to see that all its students succeed; emphasizes prevention and classroom change; and uses remedial programs as a last resort. "We must organize schools differently," they conclude. "It is not enough to take a little of program A and a little of program B and hope for the best. Rather we need to have a plan articulated through the grades to ensure that students achieve success at each step in their schooling....Effective prevention programs must be followed up with effective classroom change programs to maintain the gains students have made." See Robert E. Slavin and Nancy A. Madden, "What Works for Students at Risk: A Research Synthesis," *Educational Leadership* 46 (5), February 1989, p. 11.
19. The Current Operation of the Chapter 1 Program," p. 101.
20. In addition, 8 out of 9 middle schools are using the "replacement model," an approach similar to a pullout approach with an emphasis on basic skills. Recently, Slavin and Madden have noted that pullouts are "probably too limited a change in instructional strategy to make much of a difference" (p. 15). For further discussion of the pullout approach with respect to special education, see Chapter 3 of this report.
21. Chapter 1 Project Application: 1989-1992, pp. 84, 89.
22. Chapter 1 Project Application: 1989-1992, pp. 48, 53, 55, 59, 61, and 62.
23. Orlich, 1989, p. 513.
24. Timar and Kirp, 1989, p. 506.

Chapter 10: Recommendations

1. Pamela Keating and Jeannie Oakes, *Access to Knowledge: Breaking Down School Barriers to Learning*, Denver: Education Commission of the States, 1988.
2. Boston Education Plan, Introduction, March, 1987, p. 5.

Locked In/ Locked Out:

Tracking and
Placement Practices
in Boston Public Schools



*A Report by the
Massachusetts Advocacy Center
March 1990*

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Locked In/Locked Out: Tracking and Placement Practices in Boston Public Schools

Using Boston Public Schools as a case study, this 200-page report examines the effects of ability grouping and tracking practices on vulnerable students and argues that school restructuring must include de-tracking.

The Massachusetts Advocacy Center is an independent, non-profit organization committed to representing the interests of children in the public policy arena. In its 20-year history, the Center has issued numerous reports to the public on the status and needs of children, testified on behalf of children before administrative and legislative bodies, and represented individual children and families in their efforts to obtain needed services.



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The practice of grouping students by "ability," though widespread, is both harmful and unnecessary. This practice results in the allocation of the greatest educational advantages to the strongest students and excludes the most vulnerable — frequently minority, non-English-speaking, poor, and disabled students — from access to the most valued knowledge in our society.



The assumptions that underlie school sorting and placement practices — the definition of intelligence as immutable, the view that homogeneity is preferable to diversity, and the belief that opportunity must be allocated on the basis of "merit" — place severe limits on student achievement.



If access to knowledge is what schools are all about, then de-tracking to ensure equal access must occupy a central place in plans to restructure schools.... Change will require sustained commitment and a focused multi-year effort.



Educational reform efforts must now address the difficult but potentially more promising reform of the process of schooling itself. Any effort toward restructuring schools that does not explicitly confront tracking and placement practices and the assumptions that justify their use will, like previous efforts, fail to live up to its own promises.

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